
CFO DIVISION
OFFICE OF RISK SERVICES
ANNUAL REPORT 2012-2013

UNIVERSITY OF CALIFORNIA
ENTERPRISE RISK MANAGEMENT



CONTENTS

Foreword	1
Numbers that Count: FY 2012-2013 Successes	1
Working Smarter Initiative – Risk Services	2
A Strategic View of Risk	3
Enterprise Risk Management Program – Highlights	4
ERM Website	4
Enterprise Risk Management Information System	5
UC Plan	7
My Managed Risk Portal	8
ERM – Continuing Education as a Key Program Component	9
Enterprise Risk Management Program – Results	12
Risk Treatment	19
Loss Prevention & Loss Control – Highlights	22
Risk Treatment – Results	30
Foreign Operations and Travel Program	34
Risk Financing	36
Captive Insurance	36
Risk Financing – Highlights	39
Crisis & Consequence Management	40
Crisis & Consequence Management – Highlights	41
Crisis & Consequence Management – Results	42
Conclusion	44
Appendix A UC ERM Program Maturity Assessment Scale	45
Appendix B My Managed Risk (MMR) Portal	46
Appendix C Laboratory Safety Resources	50
Appendix D UC Chemicals Technology Suite	51
Appendix E Laboratory Safety Systems: EH&S Technology	52

FOREWORD

Risk is an inherent and essential part of any organization. When properly managed, it drives growth and opportunity. Enterprise risk management (ERM) is the process of planning, organizing, leading, and controlling the activities of an organization in order to minimize the effects of risk on an organization's capital, earnings, and operations. Enterprise risk management expands the process to include not just risks associated with accidental losses, but also financial, strategic, operational, and other risks.¹

The foundation of the University of California's enterprise risk management program is to have people actively manage their various risks – *Everyone is a Risk Manager*.



Everyone is a Risk Manager

UC utilizes a multifunctional approach that attacks the University's entire portfolio of risk by utilizing a host of different tools, workgroups, and initiatives. Our solutions allow the University to take on new opportunities and, by managing risk strategically, ensure optimum outcomes. We have learned that by focusing on developing tools and processes that address a broad array of risks, from frequent to infrequent yet catastrophic ("black swans"), and from small to large, we create a more efficient and effective program.

While basic best practices exist for all areas of risk, these practices must be sustainable and ongoing – we need to be practiced in order to be nimble. If a solution is not used on a regular basis then we will fall short when we try to deploy it during a catastrophic event.

NUMBERS THAT COUNT: FY 2012-2013 SUCCESSES

Auto, General Liability, and Property

- 4% increase in newly reported auto claims in FY 2012-2013 compared to FY 2011-2012
- 13% decrease in new auto reports from FY 2009-2009 to FY 2012-2013
- 18% decrease in new auto reports from FY 2010-2011 to FY 2012-2013
- .04% decrease in new reports of auto bodily injury
- 24% decrease in Auto, General Liability, and Property pending claims from FY 09 to FY 2012-2013
- 19% decrease in General Liability suits over last 3 fiscal years

Environmental Services

- \$85,000 in total cost savings from internal environmental due diligence technical services
- Managed due diligence on over 30 systemwide real estate transactions/projects in FY 2012-2013

¹ Source: <http://searchcio.techtarget.com/definition/enterprise-risk-management>

Employment Practices Liability (EPL)
<ul style="list-style-type: none"> Reported EPL claims in FY 2012-2013 were up 16% from FY 2011-2012 but 8% lower than FY 2009-2010
Enterprise Risk Management (ERM)
<ul style="list-style-type: none"> 419,492 visitors to the ERM website from 209 countries over last two fiscal years (2,081,649 page-views)
Environmental Health & Safety
<ul style="list-style-type: none"> 77% reduction in slip-and-fall injuries due to slip-resistant shoe program 82% decrease in the cost of slip and fall injuries since inception of program, resulting in direct savings in excess of \$1.5 million Campuses achieved an Injury Frequency Rate of 2.73 injuries per 100 FTE — the lowest injury rate in over five years
Finance Management
<ul style="list-style-type: none"> FY 2003-2004 reported Cost of Risk = \$18.46 per \$1,000 operating budget FY 2010-2011 reported Cost of Risk decreased to \$12.49 per \$1,000 operating budget FY 2011-2012 reported Cost of Risk increased to \$13.04 per \$1,000 operating budget FY 2012-2013 estimated Cost of Risk decreased to \$12.69 per \$1,000 operating budget
Legal Spend Management
<ul style="list-style-type: none"> Net savings of \$1.4 million (5% of UCOP's annual defense costs) realized through use of Legalbill Compliance Solution
UC Student Health Insurance Plan (UC SHIP)
<ul style="list-style-type: none"> 125,000 students were enrolled in UC SHIP in FY 2012-2013 FY 2012-2013 over FY 2011-2012, number of students enrolled on average remains the same
Workers' Compensation (WC)
<ul style="list-style-type: none"> WC accrual rate at \$0.85 – lowest reported since FY 1985-1986 Returned medical center rebates totaling \$32.9 million WC indemnity claim inventory of 2,794 – 57% reduction since FY 2004-2005 5,160 reported WC new losses – 36% reduction from the annual high of 8,053 reported in FY 2004-2005

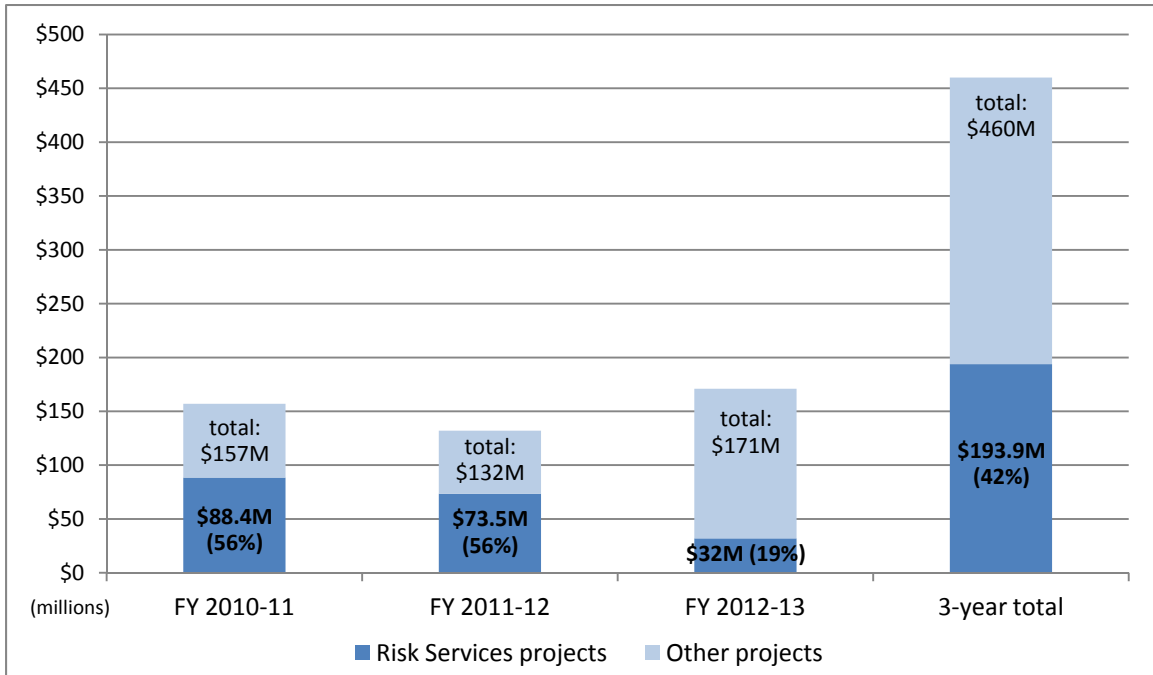
WORKING SMARTER INITIATIVE – RISK SERVICES

Faced with diminishing state support, UC's senior leadership has focused attention and efforts on administrative and operational effectiveness as a key tenet of long-term viability. The Working Smarter Initiative, introduced in FY 2010-2011, brings together systemwide, regional, and campus-level efforts under one umbrella with a strong commitment from the top: the University is determined to elevate its administrative operations to the same level of excellence as its academic and research enterprise. The initiative's target is ambitious: Within five years, the University will redirect \$500 million from administrative costs to the academic and research missions; streamline operations to address state funding cuts and the need for commonality among the campuses;

implement operational efficiencies that enhance the quality of services to students, faculty, and staff; and build a sustainable financial model to carry the University forward.²

Risk Services has participated in the Working Smarter Initiative from its inception and has been responsible for more than 40% of the total savings generated by the initiative, as shown in Figure 1 (below). Additionally, other Working Smarter projects overseen by Risk Services during 2012-2013 include the UC Travel Insurance Program (see page 44) and the UC Equipment Maintenance Insurance Program, which have respectively contributed \$1.8 million and \$685,671 to the overall Risk Services Working Smarter Initiative savings and revenue.

FIGURE 1. RISK SERVICES CONTRIBUTIONS TO WORKING SMARTER INITIATIVE

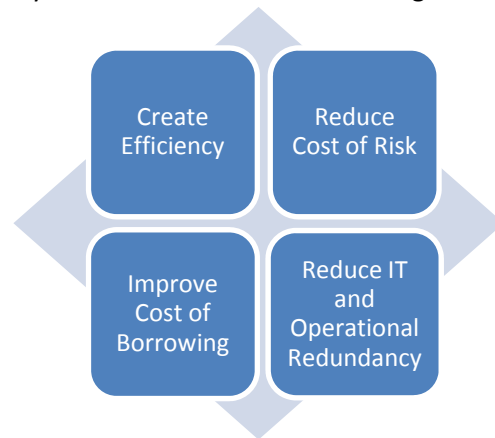


Risk Services continues to implement new ideas for the Working Smarter Initiative with the goal of reducing costs and increasing revenue.

A STRATEGIC VIEW OF RISK

Risk Services’ strategy is to ensure that the solutions we deploy are focused on results: creating efficiency, reducing the cost of risk, improving the cost of borrowing, and reducing IT and operational redundancy.

For example, leveraging our Enterprise Risk Management Information System to support automating SAS 112/115 Financial Control Attestation creates efficiency, decreases the chances of a financial loss, and reduces IT redundancy.



² <http://workingsmarter.universityofcalifornia.edu/>

ERM is considered to be so important to the success of an organization that credit rating agencies such as Moody's and Standard & Poor's now consider it in their evaluation of UC's creditworthiness. UC's ability to borrow is crucial to its success; as of December 20, 2013, UC's total debt was \$14.5 billion³. A 0.1% decrease in interest rates that UC pays on its debt load represents over \$14 million in potential savings. Ratings agencies grant favorable credit ratings to institutions that demonstrate stewardship and trustworthiness. UC's proactive approach to ERM helps it maintain its excellent credit rating. When the rating agency Standard and Poor's recognized UC for its ERM program, it was the first time a non-financial institution had been so recognized:

"THE UC HAS IMPLEMENTED A SYSTEM-WIDE ENTERPRISE RISK MANAGEMENT INFORMATION SYSTEM, WHICH, IN OUR OPINION, IS CREDIT STRENGTH." —
STANDARD & POOR'S RATINGS DIRECT ON THE GLOBAL CREDIT PORTAL,
SEPTEMBER 9, 2010

ENTERPRISE RISK MANAGEMENT PROGRAM – HIGHLIGHTS

UC is a leading center of excellence for enterprise risk management. The department has assisted numerous organizations with their ERM programs, including private and public institutions of higher education, government agencies, and corporations of varying sizes both domestically and internationally.

Cost reductions from ERM are best seen currently from a systemwide perspective where the use of metrics is relatively mature. The COSO Enterprise Risk Management – Integrated Framework⁴, which was formally endorsed by The Regents in March 2012, is used systemwide to manage risks at all levels ensuring that the university can meet its goals of teaching, research and public service.

As a key support, UCOP continues to develop the ERM Information System (ERMIS), a flexible and dynamic system, to give campus stakeholders at multiple levels the information they need to make business decisions in a timely and effective manner. The ERMIS essentially "democratizes" information, in that it has the ability to provide key data and reports to personnel at all levels and locations of the University. As the data integrated becomes richer and use becomes more widespread, the value of the ERMIS will grow in creative ways which have not yet been considered.

The Enterprise Risk Management Panel prepares a semi-annual report on the status of ERM at UC, which reports on systemwide and local campus ERM activities. The latest report was released October 19, 2012, and is available at http://ucop.edu/enterprise-risk-management/_files/erm-report-2012-final.pdf

ERM WEBSITE

The ERM website (<http://www.ucop.edu/enterprise-risk-management/index.html>) has become a leading source for information and tools that attracts visitors from around the world. The number of individual visitors and the number of page-views continues to increase.

³ <http://www.ucop.edu/bondholder-information/debt-information/debt-summary.html>

⁴ http://www.coso.org/documents/coso_erm_executivesummary.pdf

WEBSITE STATISTICS

From July 1, 2011 through June 30, 2013:

- 419,492 visits over the last two fiscal years (574 visits per day)
- 2,081,649 page-views in same period (2,848 page-views per day)

Top 5 keyword searches (including variations of each) to visit website:

- Safety topics
- COSO [Committee of Sponsoring Organizations – UC’s ERM framework]
- Enterprise Risk Management/ERM
- AS/NZS 4360 [Australian/New Zealand risk management standard]
- Control Self Assessment

Over the last two fiscal years, 209 countries visited the website, with the US leading the way at 63% of total traffic (266,031 visits), and a majority of the traffic coming from California (63% or 166,727 visits). China and India follow with 3.2% and 2.6% respectively.

There is a wide variety of visitors to the website including Fortune 500 businesses, US federal agencies, state and local governments, foreign governments, and top universities and colleges:

- Some 60 Fortune 500 companies include KPMG, DuPont, Chevron, Boeing, Microsoft, MasterCard, and Disney
- Approximately 30 US federal government agencies include the Department of Homeland Security, NASA, Department of State, Department of Justice, the US Army, Navy, Air Force, and Marine Corps, and the US Department of Commerce
- Nearly 200 US based universities and colleges have spent time on the OPRS website, including Stanford, Yale, Harvard and MIT
- More than half of all state governments, three-quarters of all state school systems, a dozen city governments, and numerous foreign governments (including Canada, Australia, and Ethiopia) also look to OPRS as a trusted ERM resource
- Internal to UC, the campus that visited the website most during the last two fiscal years is UCLA, with over 6,100 views, followed closely by UC San Diego with over 5,100 views. All campuses are regular visitors to the website for ERM information and tools.

ENTERPRISE RISK MANAGEMENT INFORMATION SYSTEM

While risk management has traditionally been viewed as the process of managing hazard risks only (i.e., insurable risk and liability), the ERM program and tools are comprehensive and applicable to all types of risks, including operational, compliance, financial, reputational, communication, and strategic. The University’s ERM

program provides dashboards and reports through the Enterprise Risk Management Information System (ERMIS), easy-to-use tools (e.g., Excel workbooks) for self-assessments, ERM Maturity Level Work Plans for managing the ERM program, and a variety of other resources to help users throughout the system.

Of the risk categories, hazard risk is currently the category for which the University has the best and most timely data, and therefore offers an excellent data mine for demonstrating the ERM program’s savings and value. Effective enterprise risk management has progressively reduced the direct cost of risk (Cost of Risk per \$1,000 of Operating Revenue, based on actual claims) from \$18.46 in FY 2003-2004 to \$12.69 in FY 2012-2013. The accumulated cost avoidance systemwide over this same period totals about \$867 million. Campuses have benefitted from these savings through reductions in the Workers’ Compensation and General, Automobile, and Employment Liability premiums.

The ERMIS centralizes data from many sources to create a foundation of information which is accessible, updated automatically, transparent, and less prone to error. As of June 2013, the ERMIS had 46 dashboard reports providing up-to-date information on 162 distinct key performance indicators. Dashboards incorporate information from various online systems to provide standards for best practices and campus comparison data. A user requesting access to these dashboards is often seeking to understand and improve their department or campus’s performance with regard to managing risk.

The ERMIS also provides organizations at all levels of the University with automated reports that were formerly prepared manually, thereby reducing the staff time spent in updating information provided regularly to leadership. For example, quarterly loss data previously compiled at UC Davis manually over the course of a few days now takes a few minutes to report on department specific loss performance. These dashboard reports are shared directly with campus leadership and provide a consistent method over time to keep them informed. The UC Bond Debt dashboard on the ERMIS, for example, has reduced the OP staff cost of reporting on bonds by 0.5 FTE. The ERMIS reports are more reliable, more up-to-date, and are readily available without administrative support. As the type of data available is expanded and the correlating metrics mature, the analysis of data will be more in-depth and easily performed.

Risk Services continues to expand the number and range of ERMIS dashboard reports, engaging with our customers by working with them to provide more varied and powerful ways to view and work with their data. The table below lists selected examples of the 46 dashboard reports currently in production.

TABLE 1. SELECTED ERMIS DASHBOARD REPORTS

Dashboard Name	Description
CFO Division AIM: Actionable Information for Managers	Promote positive administrative behavior at the campus level via campus-by-campus comparisons. Results indicative of business/operational performance and are within Chancellor’s realm of control. Based on input from all 5 CFO direct reports.
UC Construction UCIP Tower 1	Provide visibility and trending on UC Construction projects by location and project.
UC Bond Debt	Provides visibility and trending on UC bond debt by location.
BSAS	Report on the Be Smart About Safety (BSAS) Loss Prevention and Loss Control Funding projects funded by OPRS.
Medical Quality	Extends medical quality reporting data to support risk management activities.
Travel Incidents, Calls, Claims	To correlate and report data from all travel insurance and travel agencies for UC students and staff traveling throughout the US and world. (Anticipated)
Police Department Annual Report	Contains data on annual campus crime statistics. http://police-statistics.universityofcalifornia.edu/

Dashboard Name	Description
UC Travel Dashboard – Connexus	Tracks campus adoption of the Connexus travel system and actual savings for campuses that utilize Connexus.
UCI Ergonomics - Remedy, Equipment Costs	Ergonomics reports that reflect data around preventive and worker's compensation evaluations by department, software installation checks, subjective risk levels, and pain/discomfort levels across evaluation periods at each coordinating point at UCI.
UCI Safety On Site Program Metrics	The Safety on Site (SOS) dashboard is used by UC Irvine to provide management with progress updates on SOS completion activities. The SOS fulfills the employee portion of UC Irvine's new implementation of the Injury & Illness Prevention Plan.
Waste Diversion	Contains results of the annual waste diversion campus survey. Allows for comparison of recycling/waste diversion between campuses.
Human Capital Dashboard	Provides Human Resource related correlations by department and reason description by utilizing Enrollment, FTE, Headcount, Hours, EPL Claims, Employee Separation/Retirement, OSHA Rates and Harassment Prevention Training.
Human Capital Return On Investments Enhancements	Illustrates the direct and indirect costs of human capital risks at UC locations and enterprise-wide
Enterprise Master Scorecard	High level aggregated scorecard results for Safety Index and Human Capital Dashboards.
Safety Index Dashboard	Provides Safety related loss and exposure correlations by department and cause description by utilizing the following elements: WC Claims, FTE, Hours, Headcount, Vehicles, GL, Student Population, Acres, Property Losses and OSHA rates.
UCSD Scorecards	Display the results and analysis of three different types of survey results: Customer Satisfaction, Staff at Work, and Student Satisfaction. (In Development)
Mission Continuity	Provides Mission (Business) Continuity plan completion counts for all locations at the department level, and detailed UC Resilient reports.
UC Irvine	Select Human Capital and Safety Index KPIs (WC Incident count, Fire System Upgrades, Retirement Eligibility and Employee Separation) with fire and life safety data added.
Reputational Risk (CDPH)	Provides aggregated counts and trends for medical center related complaints and penalties as reported by California Department of Public Health.
Reputational Risk (OSHA Cube)	Visibility on OSHA claims against UC locations that may cause reputational risk to UC.
Office of General Counsel (OGC)	Provides visibility to legal cost by locations.
Medical Center Professional Liability (PL) Cube	Provides users the ability to create ad hoc reports utilizing selected Medical Center claim data.
Medical Center	Provides Medical Center loss and exposure trends and correlations.
Budget and Risk Assessment	Displays results of facilitated Risk Assessment sessions.
ERMIS User Adoption Report	Statistics and user contact information to facilitate collaboration across UC locations.
Cognos Audit	Reporting on the number of users, locations, frequency of use, and average time spent using ERMIS Cognos dashboards and individual reports.
UC Santa Cruz WC Customization	Trailing indicator of SWIM systems and campus environment's impact on workers' compensation incident rates at UCSC over time. Benchmarked against other UC campuses and the overall UC campus average. (In Development)
UCSD UC Tracker Dashboards	Provide listing of departments by Vice Chancellor area, certifiers and performers indicating certification status and date. Control certification frequency.

UC PLAN

UC Plan/Budget Development System (BDS) is enterprise planning software that provides a complete, dynamic environment for developing timely, reliable and personalized forecasts and budgets. UC Plan provides numerous benefits to UCOP departments and groups including Budget, Capital Projects, Capital Markets, and the Research Grants Planning Office, by providing a web-enabled interactive tool for managers that is user friendly and has

advanced reporting capabilities. UC Plan/BDS was the first application developed under the ERMIS at UCOP. UC Plan/BDS automates the budget formulation process for FY 2012-2013 at UCOP from a time-consuming paper- and spreadsheet-driven exercise to a streamlined distributed database tool that will touch every division, subdivision, and department within UCOP.

UC Plan/BDS went live in February 2012; phase 2 enhancements were rolled out in February 2013. There are currently 40-50 active users in BDS at any given time and there are approximately 110 registered users. In addition, there are over 200 users viewing the BDS reports in ERMIS.

The UCOP Budget Office and the ERMIS team built on the successful initial roll-out of the BDS system and developed system enhancements that addressed the end users' two main concerns: the addition of the Payroll Entry tab, which has given the flexibility to add payroll budgets directly into the system at granular levels; and the ability for users to view data at the consolidated levels rather than just down to the lower levels like Object Code, which has given much needed high-level analysis of data.

Separately, the ERMIS team has been working with the Research Grants Planning Office (RGPO) on a UC Plan project that combines data from the UCLA data warehouse with information from RGPO's grant management system (GRAIL). This UC Plan/RGPO solution provides a complete and accurate picture of RGPO fund, account and UC encumbrance balances and is updated daily. Prior to the creation of this solution, a financial analyst in RGPO had to manually query, assemble and reconcile the information from multiple sources. This manual process was done monthly and took approximately 5 days to complete. The new solution takes approximately 15 minutes to run and is refreshed daily.

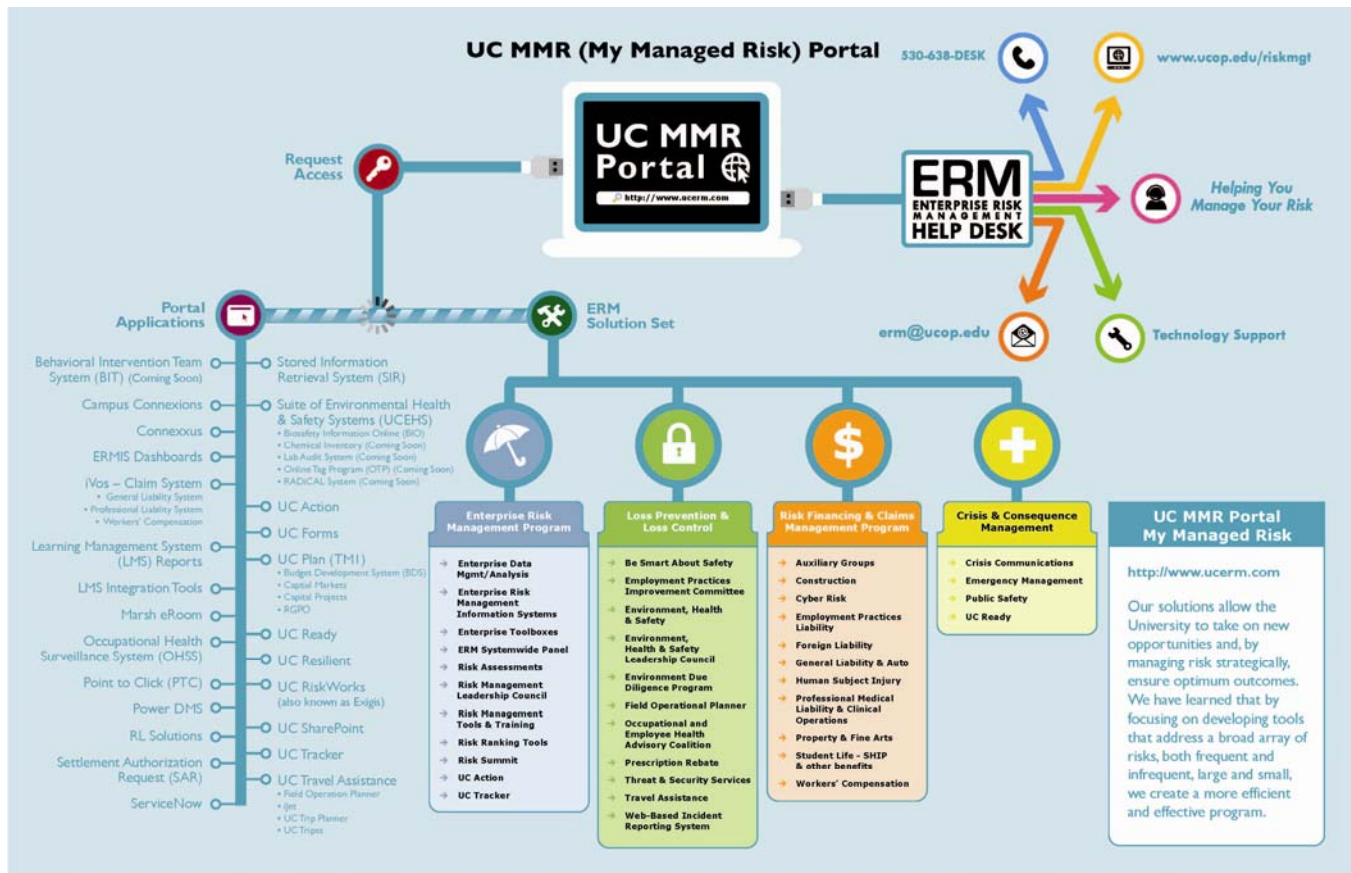
UC Plan/Capital Projects provides a complete planning and analysis environment for critical performance management activities driven by an organization's planning needs. In contrast to the financial forecasting of the Budget Development System, UC Plan/Capital Projects is a comprehensive planning tool for large scale construction across all campuses within the UC system. As part of the ERMIS solution, UCOP has implemented UC Plan/Capital Projects as a distributed web-based database solution in support of a full range of planning requirements among the campuses and contributions from a broad range of budget planners and approvers at the campuses. UC Plan/Capital Projects addresses these interrelated needs with on-demand analysis, data and user scalability, data integrity, and automated workflow via the web for managed participation, including dashboard and operational reporting. The ERMIS team is using UC Plan to provide increased functionality and operational efficiency for UCOP Capital Projects and UCOP Capital Markets Finance by providing a web-enabled interactive tool for campus stakeholders that is user friendly and has advanced reporting capabilities.

MY MANAGED RISK PORTAL

The My Managed Risk (MMR) portal was designed as an entry point to the services and resources provided by Risk Services. It serves as a centralized location for authorized users to access enterprise risk management-related tools and information.

The portal allows users direct access to their authorized ERM applications, as well as the ability to view content related to the ERM Solution Set and at the same time, stay informed of up-to-date news and articles directly related to enterprise risk management. The streamlined design also provides an efficient way for users to search within the MMR Portal in order to retrieve contents of interest quickly.

FIGURE 2. MY MANAGED RISK PORTAL



See Appendix B for a larger diagram and more information about the MMR portal applications.

ERM – CONTINUING EDUCATION AS A KEY PROGRAM COMPONENT

Ongoing education and training are a critical element of the ERM program and are provided in many forms.

RISK SUMMIT

Risk Summit 2013 continued to grow in attendance and introduced several new programs, such as ERM University, with the common goal of furthering Working Smarter through the sharing of information. The 2013 Risk Summit had over 900 registrants from within the UC system representing a variety of disciplines, including:

- Continuity Planners
- Controllers
- Counseling Professionals
- Directors of Recreational Sports
- EH&S
- Emergency Managers
- Fire Marshals
- Human Resources/Disability Managers

- Office of General Counsel
- Police Chiefs
- Risk Managers
- Student Affairs
- Student Health Services
- Wellness

ERM UNIVERSITY

The University of California system, regarded as one of the premier higher education and research institutions in the world, is also proud of our Enterprise Risk Management program. In keeping with our mission of education, research and public service, ERM University was created to help other organizations as they continue their journey to implement ERM. We believe that “Everyone is a Risk Manager” (ERM). When employees learn how to manage risk and are provided the right tools, an organization can truly optimize risk, meaning less operational failure and the ability to leverage opportunities. In the first year of this new program, ERM University had over 50 attendees representing higher education, hospitals, and state government. The California Department of State Hospitals sent the largest contingent to learn about ERM, sending more than 25 employees to participate in this one day training event.

WEBINARS

Risk Services provides training and information via webinar on a wide range of topics to a large and varied audience. While attendance at each webinar varies, the distribution lists used to send webinar notices and invitations include more than 250 individuals, both internal and external to UC; requests to be added to the distribution lists are received regularly.

WEBINARS PRESENTED BY RISK SERVICES IN 2012-2013

ENTERPRISE RISK MANAGEMENT TOOLBOX WEBINARS

- ERM Toolbox: Captive Insurance, Part 2 – 7/24/2012
- ERM Toolbox: The UC Field Operational Planner – 8/28/2012
- ERM Toolbox: Directors & Officers Insurance 101 for Not-for-Profit Entities – 9/25/2012
- ERM Toolbox: Understanding the Actuary – 10/23/2012
- ERM Toolbox: Facilitating a Productive Meeting in the UC Environment – 12/4/2012
- ERM Toolbox: Subrogation – 1/22/2013
- ERM Toolbox: Anatomy of a Waiver – 2/26/2013
- ERM Toolbox: Communicating the Benefits of ERM – 3/26/2013
- ERM Toolbox: PRISM Risk Assessment Tool for Library Collections – 4/23/2013
- ERM Toolbox: Importance of Professional Development in Implementing an ERM Program – 5/28/2013
- ERM Toolbox: Everyone is a Risk Manager – ERM Basics – 6/25/2013

ERMIS TOOLBOX WEBINARS

- Session 1 – May 16: Safety Index Dashboard, Human Capital Dashboard, and UC Ready Dashboard

- Session 2 – May 30: CFO Actionable Information for Managers (AIM) Report Dashboard, UC Debt Dashboard, and Be Smart about Safety Dashboard
- Session 3 – June 13: Demystifying Risk Appetite: How to Move it from Concept to Practice (by request; this was an encore presentation by John Gregg of a Risk Summit 2013 session)
- Session 4 – June 27: UCI Injury Rates and BLS Rate Dashboard, UCI Academic/Non-Academic Dashboard, and UCLA HHS: Injury Rates and OSHA Rates Dashboard

RISK & INSURANCE MANAGEMENT SOCIETY (RIMS) GOLDEN GATE CHAPTER

- Understanding the Actuary – 9/13/2012
- The new and upcoming changes for workers compensation self-insured programs in CA - including a new fast-track system for companies with good credit ratings – 11/08/2012
- The current state and future of terrorism coverage – 12/13/2012
- Certificate of Insurance: Avoiding the Minefield of Misuse – 01/10/2013
- Use of Surety Bonds in Construction & Surety Market Update – 02/14/2013
- Post Disaster Community Resilience – 03/14/2013
- California Workers' Compensation Reform: SB 863 – 05/09/2013

STUDENT HEALTH BENEFITS

- ADHD in the College Population – Testing, Treatment, and Controversies – 9/27/2012
- Utilization Management at Anthem Blue Cross – 10/2/2012
- Student Health Insurance and Health Care Reform – 10/16/2012
- The Clinical Side of Anthem Blue Cross – Case Management – 11/06/2012
- Behavioral Health Utilization Management and Case Management – 11/30/2012
- Injection and Infusion Documentation and Coding for Nurses – 12/7/2012
- Coding Update for Counseling and Psychological Services – 12/17/2012
- Transgender Utilization Management at Anthem Blue Cross – 01/29/2013

ASSOCIATE IN RISK MANAGEMENT DESIGNATION

Risk Services encourages and facilitates ongoing education and development for employees who wish to earn the designation of Associate in Risk Management (ARM) through the American Institute for Chartered Property Casualty Underwriters and the Insurance Institute of America (the Institutes). Led by Director of Environment, Health and Safety Erike Young, this series of instructional webinars and study sessions aids employees as they work through the three 10-week classes required for ARM certification, and is offered to UC employees at no cost to them or their department. In fall of 2011, the Institutes significantly revised and restructured the ARM course to include increased emphasis on enterprise risk management. As a result, new sessions of the ARM 54 and 55 courses were taught in person at UCOP and via webinar, with over 100 UC employees participating in the courses. Additionally, the courses were made available to those outside of UC for a fee, bringing total enrollment for all courses to over 400. All of the course webinars are recorded and available for UC employees to continue their professional development “on-demand” by visiting www.armstudygroup.com.

ENTERPRISE RISK MANAGEMENT PROGRAM – RESULTS

UC Risk Services developed the ERM Maturity Level Framework (see Appendix A for more detail) to enable campuses to measure and monitor progress in their implementation of the UC ERM Program. This Framework is based on the COSO Enterprise Risk Management – Integrated Framework, which was adopted by the University in 2004. The purposes of the UC ERM Maturity Level Framework are to:

- Define the scope of campus/location ERM programs
- Document ERM efforts planned and accomplished
- Enhance campus ERM programs through collaboration
- Establish ERM maturity benchmarks and measure growth

The UC ERM program (which is part of the Working Smarter Initiative) continues to mature at all locations. This section presents a systemwide view of the maturity of UC's ERM Program by summarizing the maturity ratings from campuses/locations. The UC ERM program has now been in existence long enough to begin seeing multi-year trends.

UC PROTECTED HEALTH INFORMATION VALUE ESTIMATOR (UC PHIVE)

The Protected Health Information Value Estimator (PHIVE) applies a practical methodology for protected health information (PHI) protectors within UC to calculate the potential (or actual) cost of a data breach to their locations.

The purpose of this tool is to help PHI protectors understand the financial impact of a PHI breach so they can evaluate and recommend the appropriate investments necessary to mitigate the risk of a data breach. This helps reduce potential financial exposure while strengthening the University's reputation as a protector of the PHI entrusted to its care.

Users are guided through a five-step process to help them prioritize efforts to protect the security of PHI. Users begin by determining their risk appetite related to a PHI loss or breach, identifying which degrees of breach likelihood are acceptable, and understanding how the relevance of a breach may vary. Users then identify where PHI exists and could be breached (PHI "homes"). Then they assess risks to those PHI homes, determine the relevance of a breach and a security readiness score for each PHI home, and determine potential repercussions of a breach. Potential areas of repercussions include reputational, financial, legal and regulatory, operational, and clinical. Repercussions are converted to terms of financial losses and totaled.

This methodology is described in greater detail with examples in the American National Standards Institute (ANSI) publication, "The Financial Impact of Breached Protected Health Information" (available from ANSI at no charge via: <http://webstore.ansi.org/phi/>). UC PHIVE is available from the ERM Service Desk (erm@ucop.edu).

UC PROTECTED INFORMATION AND INTELLECTUAL PROPERTY VALUE ESTIMATOR (UC PIIPVE)

The Protected Information and Intellectual Property Value Estimator (PIIPVe) applies a similar methodology as the PHIVE tool, but with a focus on potential losses to sensitive information beyond the healthcare sector, including intellectual property.

The basic framework utilized by a risk owner using PIIPve to conduct an assessment and calculate the potential (or actual) cost of a data breach to their locations is identical to PHive, but the repercussions and considerations are specific to the types of losses the University could incur in the event of a loss or breach of its intellectual property acquired or developed through mission-critical activities such as research.

As with PHive, PIIPve is available from the ERM Service Desk (erm@ucop.edu).

UC PRESERVATION RISK INFORMATION SYSTEM (UC PRISM)

The Preservation Risk Information System (UC PRISM) has been developed with the cooperation of the UC Berkeley Director for Library Preservation, Barclay Ogden, to help UC libraries identify, evaluate, and manage risks of damage and loss to their collections.

As with other risk assessment tools, PRISM guides a user through customized screens giving the user access to data that informs decision-making on cost effective management of library collection risks. The steps include:

1. Identifying common hazards to the long-term survival of the library collection
2. Creating a “risk profile” by estimating the probability and business impact of losses associated with the identified hazards
3. Evaluating the effectiveness and cost effectiveness of potential changes to reduce risk
4. Using the relative cost effectiveness of potential changes to assist management decision-making with limited resources

PRISM uses data collected from a variety of expert sources to help inform users’ understanding of risks to library collections, including, but not limited to United States Geological Survey data regarding earthquake risk; Federal Emergency Management Agency flood maps; Insurance Services Organization data and loss causes from nationally collected property claims; and Image Permanence Institute data on paper collection aging rates in various environments.

This data helps users understand the costs of risks which may be mitigated or prevented through implementation of additional controls. The costs of those additional controls, their useful lives, and appropriate discounting are all considered in this process. The final result is an estimate of return on investment for the range of controls proposed.

In June 2013, PRISM was presented at the UC Risk Summit and to Fine Arts Symposia at UC Irvine and UC Davis. Because the primary user group is limited, PRISM is available to interested UC library personnel and fine arts personnel for field testing through Barclay Ogden (bogden@berkeley.edu).

ERM MATURITY LEVEL MODEL

The ERM Maturity Level Model has itself matured since its implementation five years ago. The Model adds consistency to the assessment and systemwide reporting on the maturity of campus/location ERM programs. UC’s maturity model is based on the Standard & Poor’s model where maturity equates to the breadth and depth of the risk management function throughout the organization. See Appendix A for more information about the maturity rating scale.

ERM PROGRAM GOALS

The ERM Program Goals and Common Objectives have been in existence for a few years enabling trends to be seen. Table 2 shows the progress toward achieving the long-term program goals. While generally heading upward, the recent downward trend in maturity reflects program interruptions caused by management turnover at many campuses/locations and the introduction of new mitigation actions that are not yet mature.

maturity ≈ breadth & depth of the risk management function throughout the organization

TABLE 2. MATURITY OF ERM PROGRAM GOALS – ALL CAMPUS/LOCATIONS

	Jan 2011	Sept 2011	Sept 2012	Aug 2013
Internal Environment / Objective Setting	2.00	2.61	2.76	2.67
Articulate and promulgate the risk management philosophy and risk appetite of the UC system, campuses and medical centers	1.89	2.45	2.55	2.45
Develop a campus/medical center environment in which risk assessment and risk management (mitigation) is integrated into all business practices and decision-making activities	2.00	2.55	2.82	2.73
Establish a culture that promotes innovation consistent with top management’s risk appetite allowing managers to manage risks within their spheres of responsibility consistent with established risk tolerances	2.13	2.82	2.91	2.82
Event Identification / Risk Assessment	2.44	2.77	2.86	2.77
Assist management with developing a portfolio view of current and emerging risks across the enterprise (strategic, financial, compliance, reporting and reputational)	2.44	2.82	2.91	2.82
Promote an efficient and repeatable methodology for identifying, quantifying, comparing, benchmarking and prioritizing risks	2.44	2.73	2.82	2.73
Risk Response / Control Activities	2.56	2.64	2.91	2.91
Assist management to identify risk indicators and to develop and implement action plans to mitigate the assessed risks	2.56	2.64	2.91	2.91
Information and Communication	2.22	2.45	2.64	2.59
Establish and maintain a campus communications structure/support network to facilitate a greater understanding of the University’s risk management philosophy	2.22	2.45	2.64	2.59
Monitoring	2.33	2.36	2.50	2.59
Assist with developing methodologies to monitor regularly the risks identified and the effectiveness of mitigation activities; and to communicate findings to responsible executives	2.33	2.36	2.45	2.59
Continuously assess risk management strategies to assure they remain current with regulatory, operational and legal changes; emerging risks and opportunities; and strategic plans	2.33	2.36	2.55	2.59

ERM COMMON OBJECTIVES

The ERM program goals are achieved by each campus/location defining and accomplishing the systemwide common objectives and their local program objectives. Table 3, organized by COSO ERM component, provides a summary of the maturity ratings provided by the campuses/locations for common and local objectives. *Common Objectives* are objectives that all campuses/locations agreed to include in their ERM Maturity Work Plans. *Additional Objectives* are unique objectives the campuses/locations added to their ERM Maturity Work Plans. The average maturity ratings for the common objectives enable UC Risk Services to better measure how the campuses/locations are managing their ERM Programs and determine where assistance is needed to ensure an effective ERM Program systemwide. The common objectives show that the UC ERM Program continues to grow.

TABLE 3. ERM OBJECTIVES - AVERAGE MATURITY RATINGS BY ERM COMPONENT, 2011 - 2013

ERM Component	Common Objectives			Additional Objectives			Average of All Objectives		
	Sept 2011	Sept 2012	Aug 2013	Sept 2011	Sept 2012	Aug 2013	Sept 2011	Sept 2012	Aug 2013
Internal Environment/ Objective Setting	2.76	3.21	3.26	3.19	3.26	3.09	3.00	3.23	3.21
Event Identification/ Risk Assessment	2.82	3.05	3.03	3.30	3.26	2.94	3.09	3.08	3.02
Risk Response/ Control Activities	2.96	3.28	3.31	3.33	3.50	3.29	3.22	3.32	3.27
Information & Communication	2.62	2.99	3.03	3.29	3.32	2.63	3.08	3.04	2.97
Monitoring	2.43	2.81	2.93	3.00	3.00	3.00	2.66	2.82	2.94

ERM SYSTEMWIDE RISK ASSESSMENT

The vice chancellors of administration and their subsidiary units provide all the services necessary to support the university's teaching, research, and public service mission. They budget and account for all sources of funds, build and maintain buildings and landscape, manage human resources, and provide for the health and safety of all students, faculty, staff and visitors. The campuses of the University of California vary considerably in size and academic emphasis. Total annual revenues in FY 2011-2012 varied from \$376 million (UCM) to \$5.6 billion (UCLA). The number of students also varied considerably from 4,716 (UCSF) to 40,675 (UCLA). Five of the campuses have medical centers.

UC Risk Services conducted a survey in 2012 in conjunction with the systemwide ERM Panel to update the 2010 assessment of risks by the vice chancellors of administration at the campuses/locations. The vice chancellors were asked to review their previous responses and revise them to accurately reflect their current environments relative to the same risks. The survey captured which risks they consider most significant and assessed the overall effectiveness of current activities performed to mitigate those risks. The 2010 and 2012 reviews were conducted to consolidate their perspectives into a systemwide view and to steer the efforts of the UC ERM team and Panel.

The vice chancellors were asked to assess a list of 44 risks resulting from a study done by UC Risk Services to identify some of the most common risks facing higher education. While campuses added risks to the assessment specific to their locations, none of the additional risks were common to a majority of locations. See ERM Bulletin

#12 for the list of the 44 risks and suggested mitigations (<http://www.ucop.edu/enterprise-risk-management/resources/erm-bulletins.html>).

The most significant difference between the 2010 and 2012 surveys was the inclusion of detailed descriptions of controls in place to mitigate the risks. The vice chancellors described the current mitigation and control activities for each risk by listing their programs, policies, and procedures.

ANNUAL AND QUARTERLY RISK REPORTS

Building on the success of the first annual Campus Risk Report to the Vice Chancellors of Administration (VCAs) which was compiled and distributed in the spring of 2012, the Office of Risk Services began developing quarterly Campus Risk Reports, starting with the 4th quarter of FY 2011-12. This report also included a comprehensive selection of metrics for each UC campus, based on data that is readily available in the ERMIS or other previously-generated documentation, that provided key performance indicators (KPIs) for a particular UC campus' risk profile. The report consisted of the following 18 metrics:

TABLE 4. KEY PERFORMANCE INDICATORS INCLUDED IN CAMPUS RISK REPORT

KPI Description	Explanation of Metric
National Fire Protection Association (NFPA 1600 Standard) - Emergency Management/Business Continuity Programs	Metric calculates: Level of conformity with National Standard programmatic Emergency Preparedness/Management benchmarking against Standard programmatic criteria
Hospital Consumer Assessment of Health Care Providers and Systems (HCAHPS Rating) of 9 or 10	Metric tracks: The percentage of patients that scored the overall rating of the hospital (question 21 on the Hospital CAHPS survey) with a 9 or 10 (Medical Centers only)
Hospital Consumer Assessment of Health Care Providers and Systems (HCAHPS) Percentage Definitely Recommend	Metric tracks: The percentage of patients that scored the Definitely Yes to question 22 on the Hospital CAHPS survey asking the patient would they would "recommend this hospital to your friends and family" (Medical Centers only)
Workers' Compensation (WC) Incidents Relative to Hours Worked	Metric calculates: # of Claims per 100 FTE ((WC Claims *200,000) / Number of Hours Worked)
Medical Center Professional Liability (PL) Cost of Claims by Adjusted Patient Days	Metric calculates: Total Cost of Incurred Claims by Occurrence Date per 10,000 Adjusted Patient Days (Medical Centers only)
Workers' Compensation Cost Incurred Relative to Hours Worked	Metric calculates: \$ Incurred per 100 FTE ((Total Incurred *200,000) / Number of Hours Worked)
Medical Center PL Count of Claims by Adjusted Patient	Metric calculates: Count of Claims by Occurrence Date per 10,000 Adjusted Patient Days (Medical Centers only)
Medical Center PL Count of Incurred Claims by Risk Adjusted Exposure	Metric calculates: Count of Claims by Occurrence Date per 1,000 Risk Adjusted Exposure (Medical Centers only)
Medical Center PL Cost of Incurred Claims by Risk Adjusted Exposure	Metric calculates: Total Cost of Incurred Claims by Occurrence Date per 1,000 Risk Adjusted Exposure
Master Builder's Risk (MBR) Insurance Program	Metric calculates: Incurred Losses as % of Premium Paid
UC Equipment Maintenance Insurance Program (UCEMIP)	Metric calculates: Savings from the UCEMIP program
UC Ready Departmental Continuity Plan Completion %	Metric calculates: Percentage of departments or units who have completed their UC Ready continuity plans

KPI Description	Explanation of Metric
UC Bias Crimes	As reported in the systemwide University of California Police Department Annual Report, bias-motivated cases are those motivated by a bias against the victim due to the victim's actual or perceived ethnicity, physical or mental disability, race, religion, or sexual orientation
Cost of Risk	The cost of risk at each campus (per \$1,000 of operating budget) include self-insured losses from Workers' Compensation, General Liability (including Auto, Property, and Employment), and Professional Liability. Also included are miscellaneous premium, claims administration, and safety expenses associated with UC's risk.
UC Action Completion	Completion % of UC Action retrospective reviews (required for all claims of more than \$50,000) by campus
Percent of Employees Separated in Period Based on Headcount	
Percent of Employees Newly Hired in Period Based on Headcount	
Percent of Employees Eligible for Retirement	

The Quarterly Campus Risk Report provides the campus risk profile at a glance and highlights areas of concerns for the VCAs, which will allow the VCAs and their staffs to pay closer attention to the highlighted risks. The VCAs and their staffs can log on to the ERMIS and obtain more details on each risk to conduct root-cause analysis and obtain more details on each score.

In addition to the selected KPIs listed above, which will be revised periodically as new ones are created, the Campus Risk Report includes the top ten risks for the UC system and the top ten risks as identified by each campus in the campus-wide risk assessment, as well as the common mitigations for these risks. The report also includes the latest ERM maturity model level and analysis and the top 3 claims causes by frequency and severity of each insurance program (Workers' Compensation, Auto, General Liability, and Property) over the past 5 years.

Starting in mid-FY 2013-2014, these reports will be revised to provide more effectively targeted, actionable information for each campus, including more communication on Risk Service's efforts and issues for the last quarter. Additionally, the new quarterly reports will provide trending analysis on the areas of concern and best practice mitigation solutions or strategies.

UC RISK APPETITE DEFINITION AND ASSESSMENT OF RISKS (UC RADAR)

"Risk appetite" is the amount of risk, on a broad level, an entity is willing to accept in pursuit of value. Risk tolerance is the acceptable level of variation relative to achievement of a specific objective, and often is best measured in the same units as those used to measure the related objective.

The UC Risk Appetite Definition and Assessment of Risks (UC RADAR) workbook is a new advanced-level ERM tool, created in Excel, that will help campuses/locations determine how much risk they are willing to accept in the pursuit of achieving their objectives (risk appetite). The risk appetites and tolerances defined within UC RADAR are used by a modified version of the Higher Education risk assessment tool included in the workbook to enable campuses/locations to perform risk assessments relative to their risk appetite. Risk appetite information can also be exported to the ERMIS for use in evaluating key performance indicators on dashboards.

UC RADAR is easy to use and provides a practical and structured approach to assist ERM work groups with defining both risk appetite and tolerance for their campus/location. The ERM coordinators at a campus/location, for example, can use UC RADAR to facilitate and document discussions of risk appetite and tolerance with their ERM work group and present their risk appetite to their senior management for adoption.

UC RADAR and its associated User Guide are available from the ERM Service Desk (erm@ucop.edu)

CLAIM CAUSE CODE ANALYSIS – FIVE YEARS - FREQUENCY AND SEVERITY

Not all risks are insurable but many are. Analyzing our insurance claims helps us to design risk treatment programs to avoid repeating mistakes. The following illustrates how Risk Services works with its third party administrators (TPAs) to collect and analyze claims data from all UC campuses to help gain a better understanding on how to efficiently insure high risk areas in each program.

Table 5 is based on claims data between 7/1/2008 to 6/30/2013 for Auto, General Liability (Bodily Injury and Property Damage), Employment Practice, and Property (based on date each claim was reported), and Workers' Compensation (based on date of injury). Each section has claim information organized in two parts: Frequency and Severity. This information provides UC with an idea of which type of claims occur the most and which types require the most funding.

TABLE 5. TOP CLAIM CAUSES FOR PAST FIVE YEARS BY FREQUENCY AND SEVERITY

Auto Liability – Top 3 Claim Causes by Frequency	Claim Count
Improper Backing	941
Misjudged Clearance	620
Inattentive	395
Auto Liability – Top 3 Claim Causes by Severity	Total Incurred
Ran Stop Signal/Sign	\$3,471,799
Failed to Yield Right of Way	\$3,206,223
Lost Control	\$2,490,563
General Liability-Bodily Injury – Top 3 Claim Causes by Frequency	Claim Count
Chemical	239
Slip & Fall Inside	158
Slip & Fall Outside	114
General Liability-Bodily Injury – Top 3 Claim Causes by Severity	Total Incurred
Police Action	\$4,058,026
Invasion of Privacy/Private Occupancy	\$3,633,960
Civil Rights	\$2,494,236
General Liability-Property Damage – Top 3 Claim Causes by Frequency	Claim Count
Loss or Theft of Personal Property (non-University owned, under our custody/control)	131
Valet Parking	115
Struck by Object	74

General Liability-Property Damage – Top 3 Claim Causes by Severity	Total Incurred
Unlawful Seizure	\$1,014,872
Unlawful Eviction	\$296,238
Product Liability	\$294,602
Employment Practice – Top 3 Claim Causes by Frequency	Claim Count
Discrimination-Disability	71
Retaliation	45
Racial Discrimination	36
Employment Practice – Top 3 Claim Causes by Severity	Total Incurred
Retaliation	\$10,610,070
Discrimination-Disability	\$8,644,367
Harassment	\$7,964,009
Employment Practice – Incident Rate	Incident Rate
Racial Discrimination	107
Non-Litigated Employment Practice Liability	93
Discrimination-Disability	88
Property – Top 3 Claim Causes by Frequency	Claim Count
Theft/Burglary/Robbery (University-owned property)	420
Vehicle	316
Plumbing/Heating/Air Conditioning Service	197
Property – Top 3 Claim Causes by Severity	Total Incurred
Water/Sewer Service or Defect	\$19,680,099
Plumbing/Heating/Air Conditioning Service	\$8,179,394
Fire and/or Explosion	\$5,808,384
Workers' Compensation – Top 3 Claim Causes by Frequency	Claim Count
Employee Injured by Other Party	2,660
Repetitive Work Duties	2,607
Employee Injured	2,474
Workers' Compensation – Top 3 Claim Causes by Severity	Total Incurred
Repetitive Work Duties	\$26,642,854
Employee Injured by Other Party	\$20,726,667
Employee Injured	\$18,087,020

RISK TREATMENT

Laboratory safety has been a primary focus for Risk Services during FY 2012-2013. Laboratory research is a core function of the University's operations and is an essential component of the University's three part mission of Education, Research, and Public Service. The tragic lab accident in December 2008 that took the life of research

associate Sheri Sangji demonstrates the hazard risks associated with research and the need to be vigilant in our efforts to enhance our laboratory safety programs across all UC campuses. The settlement reached with the Los Angeles District Attorney and the UC Regents dismissed the criminal charges related to this tragedy, accelerated those safety improvement efforts, and recognized that improving our research and laboratory operations is a continuous process in alignment with the UC Enterprise Risk Management Program. Using an ERM approach to identify and treat risks associated with our laboratory operations, the Office of Risk Services has implemented programs that not only address hazard, legal, and compliance risks, but also treat the operational, strategic and reputational risks associated with our research and laboratory operations.

Complying with the settlement agreement required a substantial amount of time and resources at the campuses and from UCOP. With the support of the Regents, President Yudof, and Provost Dorr, the UCOP Office of Risk Services, with guidance from the Office of General Counsel, was charged with taking the lead in coordinating systemwide resources to assist campuses in complying with the settlement agreement. The core elements of the settlement agreement required campuses to provide additional laboratory safety training and personal protective equipment, as well as to develop written standard operating procedures for approximately 5,000 chemicals by January 27, 2013, in order to certify substantial compliance to the Los Angeles District Attorney. As required by the settlement agreement, all UC locations certified substantial compliance for the initial and six month certification dates.

While the settlement agreement is specific to Chemistry and Biochemistry Departments, there is common agreement that laboratory accidents can occur in any location, in any scientific discipline. Consulting with the Academic Senate Leadership and Campus Department Chairs, OPRS developed a multi-year strategic plan in the spring of 2013 to improve the safety culture in our laboratory operations, which goes beyond the requirements of the settlement agreement. The following are the objectives of the strategic plan that serve as a road-map in our efforts to improve the safety culture in our laboratory operations:

- Evaluate current efforts to comply with the Regent's Settlement Agreement and provide systemwide recommendations to ensure that programs and procedures support the University's continuous efforts to improve the culture of safety in both research and teaching laboratories.
- Review and provide recommendations regarding current laboratory safety training programs, at both the campus and systemwide level, to ensure that content is compliant with current regulations and instructional design is appropriate for faculty and lab personnel.
- Assist in the development and/or provide resources for development of systemwide policies, procedures, and technologies to improve laboratory safety operations and compliance with regulatory requirements.
- Provide recommendations for the development of an undergraduate curriculum on laboratory safety to help provide future researchers a solid foundation in laboratory safety and risk assessment techniques.
- Evaluate and provide recommendations regarding laboratory security policies, procedures and practices, and facility design.

Since the adoption of the Laboratory Safety Strategic Plan, OPRS in coordination with campus Environment, Health and Safety Directors, have developed and/or implemented the following:

- Systemwide Laboratory Safety Policies — The EHS Directors Leadership Council proposed three systemwide laboratory safety policies which were issued by President Yudof in June 2013. These policies address:
 - Minors in Laboratories and Shops
 - Laboratory Safety Training
 - Personal Protective Equipment (PPE)

These policies, while new, provided consistent interpretations of existing regulations and provided mechanisms to ensure compliance and accountability.

- Systemwide development of Laboratory Safety Fundamentals Course — In support of the settlement agreement current Cal/OSHA regulations, and the new Laboratory Safety Training Policy, OPRS funded the development of an online Laboratory Safety Fundamentals Course. Since its release in early January, the training received the 2013 Campus Safety, Health and Environmental Management Association Solutions at Work Award and several other universities have requested to use the course as part of their training program.
- Systemwide purchase of Personal Protective Equipment — Personal protective equipment, such as laboratory coats, gloves and goggles are the last line of defense in the event of a chemical spill. When working with flammables or pyrophoric chemicals, the use of a fire resistant lab coat is essential. With the adoption of the new personal protective equipment policy, OPRS funded the purchase of over 100,000 lab coats and sets of protective eyewear at a cost of over \$4 million. Due to the volume of coats being purchased, the lab coats are currently being manufactured and distribution will begin in the fall of 2013.
- Development of Systemwide Tools to Assist Researchers — In order to assist researchers in complying with the settlement agreement, OPRS has been a leader in funding and developing new technology that empowers safe research. These tools have been developed in collaboration with faculty and have leveraged the innovation of our campuses. These tools have not only empowered our own researchers, but over 20 universities have requested access to these tools or have inquired about purchasing them. Additionally, the RADiCAL (noted below), won the 2013 University of California Larry L. Sautter Award for innovation in support of the University’s mission. The following systems have been developed and are being deployed:
 - RADiCAL – Risk Assessment Determination in Chemical Academic Labs
 - LHAT – Laboratory Hazard Assessment Tool (UCLA)
 - CIS – Chemical Inventory System
 - SIT – Safety Inspection Tool

As noted above, laboratory safety has been a major focus of OPRS over the last year. Our efforts to improve the culture of laboratory safety are being watched by other universities, as well as efforts by the National Academies of Science and the American Chemical Society. Most recently, those efforts were noted in the American Chemical Society’s *Chemical & Engineering News* article “Lab Safety at the University of California”⁵. In evaluating our risk treatment efforts, our goal is for the University of California to have the premier laboratory

⁵ <http://cen.acs.org/articles/91/i34/Lab-Safety-University-California.html> or <http://is.gd/labsafety>

safety program in the country in which parents want to send their children to UC because of our laboratory safety program and UC is the employer of choice for our graduates.

LOSS PREVENTION & LOSS CONTROL – HIGHLIGHTS

The last year has seen a number of loss prevention and control initiatives implemented at the systemwide level, many of which had an immediate impact.

CYBER RISK

“Universities Face a Rising Barrage of Cyberattacks” proclaimed an article in the July 16, 2013 edition of the *New York Times* which discussed the challenges that American universities face while maintaining their traditions of being “open and robust centers of information exchange.” The University of California is aware of the risks associated with malicious attacks, as well as those presented through unintended disclosure of information, internal breaches and loss or theft of computers, laptops, PDAs or non-electronic records.

In an effort to confront this area of risk, the University of California has been involved in developing the President’s Privacy and Information Security Initiative. Although a final report has not yet been issued, the President, Regents, and Academic Council have publicly endorsed the Steering Committee’s work and many of the recommendations. Once the report is finalized, it will set forth a Statement of Privacy Values, Privacy Principles, and a Privacy Balancing Test; require each campus to designate a privacy official to begin incorporating the Privacy Statement, Principles, and Balancing Test into the fabric of campus life; and describe a model for governance through campus privacy and information security boards.

Risk Services and IT Services recognize the need to include information privacy and security within enterprise risk management (see the article “The Reputational Risk and IT Relationship”⁶) and since the University’s implementation of an innovative cyber liability risk transfer program with Lloyd’s of London in 2010, there has been continuous collaboration with Risk Services and IT Services in the area of cyber and privacy risk.

- Development and rollout in 2013 of the Protected Health Information Value Estimator (PHIve) tool (page 12) to help understand the financial impact of a PHI breach and evaluate and recommend the appropriate investments necessary to mitigate the risk of a data breach. This helps reduce potential financial exposure while strengthening the organization’s reputation as a protector of the PHI entrusted to its care.
- As the University moves to a shared services model for administrative systems, such as the UCPath payroll personnel system/human resources information system, security and privacy activities are integrated from the very start of the process of developing/deploying these types of services.
- Several sessions were added to the 2013 Risk Summit on this area of risk, including a general session on “Institutional Framework for Privacy and Information Security” presented by Kent Wada, Director of Strategic IT Policy and Chief Privacy Officer at UCLA, and a workgroup session of the IT Security Council.

⁶ <http://www.riskmanagementmonitor.com/the-reputational-risk-and-it-relationship/>

- The Information Security Awareness Training Program was launched at seven campuses and the Office of the President, with incentive programs supported by OPRS.
- More risk assessment activities are being completed on data centers, campus and other vendors, as well as the development of standard contract language for cloud computing contracts.

UC STUDENT HEALTH INSURANCE PLAN

The University of California requires all registered students to have adequate health insurance as a non-academic condition of enrollment. In 2010, UC Office of the President Human Resources, working with a systemwide workgroup, designed, developed and created the University's first-ever systemwide Student Health Insurance Plan (UC SHIP). It was created to help students meet the health insurance requirement and to mitigate the financial impact of health care as a factor in student retention and graduation rates.

Unfortunately the first iteration of this product was not successful. After a significant medical malpractice claim involving a student treated at one of the student health centers was brought to the attention of The Regents, an audit and review of the student health centers was ordered by the Regents Committee on Health Services, which is chaired by Regent William De La Peña. At the conclusion of the review, the Regents ordered that oversight of the operations of Student Health be moved from Student Affairs to Health Affairs. In addition the financial operation of the self-funded insurance plan was moved to the CFO Division, Risk Services by Regental mandate.

UC SHIP faced significant financial challenges in FY 2012-2013. At the end of the 2011-2012 Plan year, UC SHIP staff identified problems with the actuarial analysis on, and pricing of, the plan, which had been conducted by an external consulting firm. Due to the errors in pricing, the premium collected was insufficient to cover expenses of the plan, resulting in a deficit. A new consulting team was engaged, which collaborated with two independent actuarial firms to conduct new analysis and correct the premium rates for the 2013-2014 year. A new governance structure for the plan was created and efforts are under way to bring the latest improvements in insurance administrative operations to UC SHIP, including state-of-the art utilization reporting capability and pharmacy benefit administration based on a transparent pricing model.

UC SHIP leadership has been monitoring closely the implementation of the Affordable Care Act (ACA) to assess its impact on student health plans. The federal Health and Human Services Department determined that self-funded student health plans are not subject to federal health care mandates such as the Affordable Care Act, but that they are designated as Minimum Essential Coverage. Students enrolled in UC SHIP will meet the law's individual coverage mandate and will not be subject to income tax penalties from lack of coverage. In addition, regulatory guidance was issued clarifying that students with access to UC SHIP could instead opt to purchase coverage through the state's Health Benefit Exchange and be eligible to receive premium subsidization of that coverage if they meet income requirements.

UC SHIP voluntarily aligned benefits with ACA requirements in order to provide stronger benefits for students and keep UC SHIP competitive in the insurance market. UC SHIP covers the ten Essential Health Benefits required of individual plans, has no annual or lifetime maximum dollar coverage, has no pre-existing condition exclusions or waiting periods, provides 100% coverage of preventive health care services, and provides behavioral health and substance abuse benefits in parity with any other medical condition.

ACCOMPLISHMENTS FOR FY 2012-2013

- Hired Executive Director – Self-Funded Health Plans
- Engaged new team of benefit and actuarial consulting partners
- Established new governance structure for UC SHIP
- Selected Ventegra as the Pharmacy Benefit Administrator and began implementation for the 2013-2014 plan year, which will result in increased transparency of medication expenses and improved reporting on pharmacy benefit utilization
- Selected Truven Health Analytics to provide a robust reporting system for the plan, to be launched in the 2013-2014 plan year; reporting will be available retroactive to the plan's inception

STUDENT HEALTH SERVICES CLINICAL DOCUMENTATION IMPROVEMENT TRAINING

The risk review of UC Student Health and Counseling and Psychological Services (SHS/CAPS) conducted in Fall 2011 identified opportunities to strengthen clinical documentation and coding of services. The Regents Committee on Health Sciences endorsed the recommendations of the report during the Regents' meeting of November 15, 2012, and endorsed development of systemwide policy for this area.

The review recommended that all UC Student Health and Counseling Services employ nationally-standardized coding systems to identify and categorize the services provided to patients at their facilities. Use of standard codes enables facilities to maximize reimbursement from UC SHIP and other insurance plans and allows the student health clinics to provide meaningful utilization data that is comparable across the system to drive strategic planning and operational decisions to serve the needs of UC students.

Efforts throughout the 2012-2013 academic year built upon the foundational training on coding systems that was completed in summer 2012 by all UC Student Health and Counseling Services employees who were providing patient care or performing tasks related to data collection about, or payment for, patient care. This year's work focused on specialized trainings for nursing services, minor procedures, urgent care, physical therapy, optometry, counseling and psychiatry. Altegra Health coding experts continue to work with Point N Click (PnC) template developers to ensure that services performed at SHS/CAPS facilities are captured accurately in the electronic medical record. Development of reporting systems is the next phase, which requires close collaboration with the electronic medical record standardization initiative (see below).

STUDENT HEALTH AND COUNSELING CENTERS ELECTRONIC MEDICAL RECORD IT INITIATIVE

Based upon the risk review findings, the electronic medical record (EMR) IT initiative was established to create a single systemwide healthcare management information system (HMIS) with standardized templates, coding, centralized data reporting, and an optimal hosting solution. This initiative has shown significant progress in the last 12 months in all four of its major projects:

- Migration of UC campuses onto the selected EMR information system (Point and Click Solutions/PnC): As of January 2013 all of the campuses are on PnC, and the project is now establishing various system oversight protocols to manage the vendor.
- Systemwide standardization of EMR templates, selected data dictionaries and reports: With the roll-out of the systemwide templates a consensus process was developed in January 2013 with representation

and leadership from the campuses. Additionally, the campus clinic directors are proposing changes to the standardized template library in order to facilitate a greater degree of local customization; this proposal is still under consideration at this time. The standardization of the Charge Master Data dictionary has been completed, and the prioritization of the next set of dictionaries is in process and will be selected based upon the enterprise reporting needs.

- Creation of a centralized reporting platform to allow for ease of analysis of data systemwide: The first of the two phases, the engineering development of the systemwide PnC enterprise reporting module, is complete. The second phase, focusing on further automation and roll-out to the campuses, should be completed with the implementation of version 12.4 of PnC in the fall of 2013. A robust library of enterprise reports that can be measured systemwide has been developed and implemented. The first round of reports have been generated and are being reviewed with the campuses to determine what enhancements should be made.
- Design and implementation of an optimal centralized hosting solution to provide a consistent, secure environment for the EMR application: This project consists of multiple phases and requires participation from a wide spectrum of campus personnel including the project management team, campus IT, and the system users (clinicians). Business and technical requirements of the PnC system have been developed and agreed upon with the collaboration of the above mentioned personnel. Based on both sets of requirements in combination with the security site assessment, a three phase plan has been developed to provide a centralized environment for the PnC system.

SLIP-RESISTANT SHOE PROGRAM

There are very few examples in which you can “buy” safety. A slip-resistant shoe program is one of those opportunities and the University’s program has had an immediate impact in the reduction of employee slip and falls, resulting in substantial savings to the University. As of January 2013, the University has experienced a 77% reduction in slip and fall claims in those occupations in which the shoes are mandatory. This has resulted in annual savings in excess of \$1.5 million.

Before the implementation of the slip-resistant shoe program, the University experienced an average of more than 700 slip and fall injuries per year, costing more than \$7 million annually. The pilot program, implemented in April 2011, focused on Dining Services employees, who experience the majority of UC’s slip and fall injuries. In January 2012 the program was expanded to include custodial/housekeeping, groundskeeping and animal care workers. The Directors of Environment, Health and Safety are working with the workers’ compensation managers to identify other groups of employees that might benefit from this successful project.

For more information on the program and how it is implemented, please view http://www.ucop.edu/risk-services/_files/shoes-for-crews-protected-01072013.pdf

UC SAFETY SPOTLIGHT NEWSLETTER

The systemwide Safety Spotlight newsletter is created by the systemwide EHS Injury and Illness Prevention workgroup. The newsletter includes articles on best practices and links to printable posters, training presentations, videos, and other resources to help campus offices, laboratories, and departments better integrate safety into operations. Each month, the Safety Spotlight focuses on a specific workplace safety topic, drawing on the expertise from staff in Occupational Health Services, Environmental Health & Safety, Emergency

and Business Continuity Management, and the University's Police and Fire Departments. Current and past Safety Spotlight issues can be viewed at http://ucanr.org/sites/ucehs/Safety_Spotlight/.

ERGONOMIC STUDY OF CUSTODIAL POSITIONS

At the University of California, Dining Services plays a critical role in providing food for thousands of students, patients, guests, staff, and faculty. To perform this critical job function, workers are exposed to ergonomic risks such as repetitive motion, strain, and awkward postures. During fiscal years 2008-2011, ergonomic injuries in dining services accounted for 705 workers' compensation claims, with an actuarial estimated ultimate direct cost of \$8,651,496 (loss data valued as of November 30, 2011).

In 2012, Risk Services tasked the UC Systemwide Ergonomics Work Group with conducting an ergonomic study of this group to identify problem areas and develop strategies to address those problems. The team developed best practices bulletins, recommended product sheets, and design guidelines for new construction and existing buildings. The full report can be viewed at <http://ucanr.edu/sites/ucehs/files/145287.pdf>.

With funding from Risk Services, campus ergonomists have begun pilot testing some of the recommended solutions – from automatic sushi makers to bowl lifters – all designed to reduce or eliminate injuries caused by exposure to repetitive motion.

ENVIRONMENTAL DUE DILIGENCE PROGRAM

Risk Services manages a centralized environmental due diligence program to manage potentially significant hazardous materials-related risks and liabilities associated with all systemwide real estate transactions, including gifts of real estate. The program imparts environmental liability factors into property-related financial management decisions and negotiations as an integral part of UCOP's legal and real estate services team and conforms to all applicable national (American Society for Testing and Materials) standards and Federal EPA regulations.

In FY 2012-2013, Risk Services oversaw environmental due diligence on more than 30 different systemwide real estate transactions/projects including acquisitions, sales, gifts and bequests, PG&E and U.S. Army land transfers to campuses, and faculty residential foreclosures, for a wide range of clients including campuses, foundations, Regents endowments, the division of Agriculture & Natural Resources, the Natural Reserve System, and UCOP Business & Administrative Services and the Office of Loan Programs. All of the technical environmental site investigations were conducted at no charge to clients, resulting in significant systemwide cost savings from avoiding outside consulting costs. In addition, Risk Services provided over 100 hours of technical assistance and consulting services at no charge to the UCOP Real Estate Services Group related to research, analysis, and evaluation of an extensive Regents endowment containing approximately 119 different real properties located in the San Joaquin Valley. More information on the environmental due diligence program can be found at <http://www.ucop.edu/risk-services/loss-prevention-control/environmental-due-diligence-program/index.html>

CAMPUS SAFETY AND SECURITY

The University of California makes every effort to provide safe campus environments for all the members of the University community, including students, faculty, staff, and visitors. Every UC campus has a police department

staffed by sworn peace officers with full law enforcement authority, as well as an array of counseling, education, and safety programs. Police officers handle all criminal offenses. Judicial officers handle matters concerning student conduct and campus violations. Campus judicial officers use both discipline and counseling to address abusive behavior and solve problems.

UC campuses conduct safety training as part of new student orientation and offer similar sessions for continuing students. They maintain professionally staffed health and counseling centers that help students be proactive to protect themselves as well as dealing with emergencies. Campus residence hall staff is trained to assist students in dispute resolution, safe practices, and crisis management. Residence halls are protected by automated lock and entrance control technologies.

Safety lighting, physical maintenance, and security escort services are designed to discourage or prevent criminal behavior on campus. Campus grounds are equipped with emergency alarm systems for summoning rapid help if needed. This combination of staffing and organizational and physical infrastructure is intended to help young adults learn to take responsibility for their own safety in a context of accurate knowledge of risks and resources.

Each UC campus police department has responsibility for gathering statistics, identifying reportable crimes, and reporting and publishing statistics to the Department of Education, the FBI and the public. Statistics are reported in different formats and categories depending upon legal requirements. For example, FBI reports include different crimes from those reported under the Clery Act, while the Clery Act requires statistics be reported from a wider geographic area than the FBI does (for example, crimes that occur on adjacent public property or student organization properties), and also requires reports of student disciplinary referrals and of arrests for drug, alcohol, and weapons offenses. Further, the Clery Act mandates the collection of information regarding incidents from non-law enforcement “campus security authorities” having “significant responsibility for students or campus activities,” while FBI statistics include only crimes reported to the police.

EMERGENCY MASS NOTIFICATION SYSTEMS

The ability to notify students and staff quickly when a campus emergency occurs is crucial to ensure the safety and security of the entire campus community. Federal law now requires that campuses must issue timely warnings upon confirmation of a significant emergency or dangerous situation involving an immediate threat to health or safety. Each UC campus has developed and implemented various layered and redundant methods to issue campus alerts and warnings through email blasts, text messages, social media, etc. During FY 2012-2013, Risk Services coordinated with UCOP Procurement Services to renew competitively-bid contracts with several systemwide emergency notification system vendors that will help provide consistency and reliability in the emergency notification process, while also reducing campus costs. Risk Services also contracted with one of the systemwide vendors to develop and install UCOP’s first-ever mass emergency notification system for alerting staff during off-hours.

MISSION CONTINUITY PLANNING TOOLS

Risk Services continues to lead the systemwide Continuity Planning Program whose aim is to ensure that the University is “event-ready” – prepared to continue our teaching, research, public service and patient care activities despite disruptive events such earthquakes, pandemics, fires, flood, IT disruptions, and many other types.

The Continuity Planning Program provides two web-based tools to engage department-level units in disaster-readiness, and to align their preparations with campus-level and system-level efforts: UC Ready (for use by all types of departments) and UC Resilient (for teaching and research units).

This year, Risk Services has further leveraged the Continuity Planning Program by connecting it to the ERMIS reporting system. Data collected using the UC Ready and UC Resilient tools are now displayed in interactive reports in ERMIS, allowing easy retrieval by authorized users. Examples of such information are the key personnel for each unit at a campus or medical center; critical functions, key documents and needed resources; critical risk factors affecting each unit; and lists of action items required to mitigate these factors.

The new ERMIS reports became available in June 2013 and are refreshed monthly. They include a high-level dashboard report displaying performance metrics for the UC Ready and UC Resilient planning efforts plus a set of 20 UC Resilient Detail Reports. A comparable set of 33 UC Ready Detail Reports are being developed. These reports provide a wealth of information to campuses, medical centers and their departments to assist them in making informed, data-driven decisions regarding disaster-preparedness.

RISK MANAGEMENT FOUNDATION (RMF) STRATEGIES – CONTROLLED RISK INSURANCE COMPANY, LTD

The Professional Medical and Hospital Liability Program continues its partnership with RMF Strategies, a subsidiary of the Risk Management Foundation of the Harvard Medical Institutions and part of the Harvard Controlled Risk Insurance Company (CRICO), to develop improved coding of claims to identify loss prevention issues in claims and suits. Quarterly reports are provided to senior leaders identifying major areas of exposure. This information led to surgery loss prevention projects as a focus for FY 2011-2012. For FY 2012-2013, the CRICO surgical data was used as a basis to assist in obtaining requests for proposals (RFPs) for grants as part of the program overseen by the Center for Health Quality and Innovation (CHQI). CHQI's goal is to support innovations at the UC health campuses that transform the way the health needs of Californians are addressed and therefore advance the health of California and beyond. More information about RMF Strategies is available at <https://www.rmf.harvard.edu/About-CRICO>.

EMMI SOLUTIONS – IMPROVING PATIENT CONSENT

Lack of informed consent and failure to appreciate known risks of procedures and treatment plans leads to patient dissatisfaction and is an underlying issue for many malpractice cases. Even if a physician has advised the patient of the risks, the patient may not fully understand. Often documentation of the informed consent is lacking. Healthcare organizations struggle with improving patient communication- the challenges include ensuring the communication is done at the right educational level and uses terms the patient understands. Additionally, there is the issue of ensuring clear communication so that risks and benefits are explained to and understood by the patient and the patient's family. The University of California incurred liability and defense costs of \$5,184,745 from 2006 through 2012 in cases where informed consent was identified as a primary loss prevention issue. In addition to these costs, the University has suffered indirect expenses relating to these cases.

Research has shown that consent forms are deeply flawed, inconsistent, and do not improve patient understanding or safety. A February 7, 2007, Joint Commission white paper entitled "*What Did the Doctor Say?*":

*Improving Health Literacy to Protect Patient Safety*⁷ found that 44% of patients who signed an informed consent form did not know the exact nature of the operation to be performed, and 60% to 70% did not read or understand the information in the form. More critically from the health care provider's perspective, flawed consent forms do not protect hospitals or doctors from malpractice suits.

Emmi Solutions provide an online system that helps patients and their families understand their diagnosis and treatment plans and options. Emmi programs support clinical conversations with reliable, repeatable, actionable information. Their program uses interactive media to engage patients. The interactive programs (delivered over the web and to mobile devices) help organizations overcome health literacy and retention challenges throughout the entire continuum of care. The Emmi programs help patients make sense of complex medical information and manage their expectations around diagnostic and surgical procedures, chronic health conditions, the hospital experience, and more. Emmi provides access to this engagement tool outside the four walls of the hospital and across the continuum of care. In addition, the programs are self-documenting to allow tracking of patients' experience for reporting and legal defense purposes.

A code is issued for the patient to access an interactive program which is delivered over the web and to mobile devices. The codes issued are access codes given to patients by their physician (or their staff) so that the patient can access information specific to their procedure. The number of codes reflects the number of patients who have been given the opportunity to use the system (but not necessarily the number who have actually used it).

Momentum continues to build with the use of Emmi. From July 2012 to July 2013, we have seen an issuance of over 34,000 codes from the UC Health System. This is an increase of 115% in codes issued over the prior year. The top issued programs during that time frame are Anesthesia- Adult (8,645); Colonoscopy (6,341); Upper GI Endoscopy (2,928); Patient Satisfaction: Hospital Visit Expectations (1,714); and Diabetes- Checking your Blood Sugar (999). We have also seen an increase in use at the majority of locations: UCSD: 10,534; UC Davis: 8,800; UCSF: 8,167; UCLA: 6,183; UC Irvine: 852; UCSF-Fresno: 232.

Over the next year, we expect Emmi to integrate with Epic (the electronic health record system implemented systemwide) at UCSD and UCLA. This should streamline the process of issuing Emmi codes to patients and documenting in EHR that Emmi was prescribed. Drs. Christine Lau and James Harrison were awarded a multi-center grant from the University of California's Center for Health Quality and Innovation (CHQI). Their program of work aims to standardize neurosurgical care across the five UC Medical Centers, part of which will entail standardizing the use of relevant EMMI modules to all neurosurgical patients across each campus. More information about Emmi is available at their website: <http://www.emmisolutions.com/>.

LEGALBILL

Risk Services continues to use Legalbill, a consultative legal spend management solution, to monitor, measure, and manage its legal spend. The Legalbill Compliance Solution ensures that all outside counsel invoices adhere to Risk Services Billing Guidelines. Legalbill uses a combination of compliance review, business analytics, and consultation to help evaluate outside counsel teams and implement strategies that provide qualitative, responsive, and cost-effective representation to Risk Services. This approach results in both short-term and long-term benefits and savings to Risk Services. Legalbill has developed various custom solutions for Risk Services, including dynamic drill-down dashboards and campus-level total-cost-of-case scorecards. Using these solutions, Risk Services management and OGC monitors now have the ability to access their legal spend data in real time

⁷ http://www.jointcommission.org/assets/1/18/improving_health_literacy.pdf

and identify positive and negative trends in spend. In addition, during FY 2012-2013, UC realized net savings of \$1,397,195.77 (5% of the Office of the President's annual defense costs) in defense costs for all Risk Services lines.

RISK TREATMENT – RESULTS

The results of Risk Services' ongoing efforts to mitigate and manage the University's risk continue to be positive.

WORKERS' COMPENSATION

In covering over 180,000 employees and their worldwide activities, our workers' compensation program represents our greatest liability. In order to effectively manage this liability our efforts continue to focus on loss prevention and mitigation. Through local loss prevention programs funded via the Be Smart About Safety program and systemwide mitigation initiatives deployed from the Office of Risk Services, we continue to reduce the overall cost of risk and produce cost savings for the University. Our results show that annual new losses have decreased from 7,097 in FY 2005-2006 to 5,160 in FY 2012-2013. Furthermore, the systemwide accrual rate decreased from \$1.51 per \$100 payroll in FY 2005-2006 to \$0.85 per \$100 payroll for FY 2012-2013. The FY 2012-2013 accrual rate of \$0.85 is the lowest rate since FY 1985-1986.

More information is available on the Working Smarter website:

<http://workingsmarter.universityofcalifornia.edu/files/2011/05/Risk-Services-WHYDFML-WC-highlight.pdf>

EMPLOYMENT PRACTICES IMPROVEMENT COMMITTEE

Risk Services, in collaboration with the Office of General Counsel (OGC), manages the Employment Practices Improvement Committee (EPIC). EPIC is a systemwide committee made up of professionals in risk, human resources, legal, and compliance and audit, whose mission is to reduce the number of employment practices claims and improve the working experience for university faculty and staff.

This committee takes a targeted approach to training by reviewing employment practices claims and complaints to analyze loss data, comparing departments and locations which had the most frequent loss experience and analyzing the data for trends. Upon discovering a trend, EPIC works with the campus or systemwide departments, as appropriate, to provide training programs to university managers, supervisors and employees.

In addition, Risk Services has engaged an employment liability specialist from our actuary to provide direct support to campus departments and assist with reducing workplace conflict, which is often the source of employment practices liability claims.

EMPLOYMENT PRACTICES LIABILITY RESULTS

Although still 8% lower than the total number of claims reported in FY 2009-2010, the total number of employment practices liability claims reported to the third party administrator in FY 2012-2013 increased by 16% from the prior fiscal year. Because prevention is paramount to our efforts to reduce our liability in our employment practices program, during the coming year EPIC will renew its focus to identify current trends affecting new losses and develop a response to further our loss prevention efforts.

THE SMOKE- AND TOBACCO-FREE POLICY

In January 2012 President Yudof announced that the University of California, as a national leader in healthcare and environmental practices, would demonstrate the leadership to reduce tobacco use and exposure to secondhand smoke by following the lead of our Medical Centers and our San Francisco campus to create a smoke- and tobacco-free environment on all of our campuses. At that time, the President asked each Chancellor to form a committee on their campus charged with the task of implementing this important policy by January 2014. The Office of the President, Office of Risk Services has been charged with overseeing and assisting systemwide efforts.

Since the President's announcement of the smoke- and tobacco-free policy, all campuses have established committees that are well into the process of local implementation.

We are pleased to announce that the Los Angeles campus became our second tobacco-free campus on April 22, 2013. The San Diego campus will be our third tobacco-free campus on September 1, 2013. These two campuses join the six locations that have completed their implementation ahead of our January 2014 deadline. Our remaining locations are all on track to meet the January 2014 deadline.

UC CARE

In 2013, 61% of covered US workers are reported to be in a self-funded health insurance plan, similar to the percentage reported in 2012, and 94% of covered workers in firms with 5,000 or more workers are in self-funded plans⁸. UC Care, a new self-insured PPO plan created just for UC employees and families, is led by Risk Services and the Office of Health Sciences and Services in the Office of the President, in cooperation with UC medical centers, UC physicians and Human Resources. Self funding gives the University more control through flexible benefit design and integration of provider reimbursement reforms, greater oversight of the quality of care our employees and families receive. UC Care will help us control costs for our employees by achieving lower premium rates of increase than medical inflation or the UC historical average of 10.9%.

UC Care was created to reinforce the mutually beneficial relationship between UC medical centers and the rest of the University, guide our employees to get the benefit of our world-class medical centers and control medical costs for the benefit of employees and the University. UC Care provides us the opportunity to impact the health of our employees and their families while at the same time fulfilling our mission to serve. Employees and their families can get care from UC physicians and medical centers as well as the entire Blue Shield PPO network of providers—the choice is theirs. UC Care lets each person tailor his or her health care experience to meet individual or family needs. UC Care is the result of the University's mission-focused initiatives to find smarter, more effective ways of working together to leverage the power of California's premier university system. UC Care was one of the 2014 Open Enrollment medical choices, with a program effective date of January 1, 2014.

VEHICLE AND DRIVER SAFETY

The University of California continues to improve its efforts in delivering the necessary tools and information to promote vehicle and driver safety throughout the system.

⁸ Henry J. Kaiser Family Foundation 2013 Employer Health Benefits Survey: <http://kff.org/private-insurance/report/2013-employer-health-benefits/>

The Driver and Vehicle Safety Workgroup is developing the framework for campus Vehicle Collision Review Committees that will allow the campuses to monitor the frequency of collisions and trends and to assist in the development of programs to promote safety, mitigate risk, and reduce liability for the University.

An automated Employer Pull Notice system (SAMBA) is being utilized at the majority of locations to monitor employee driving records and is being expanded in use for volunteers and students.

BSAS funding is being used for campus driver training programs and other safety initiatives. The value of a comprehensive driver training program has been demonstrated at UCSB, where an actuarial analysis concluded that 5 years after initiating their driver training program, the campus experienced an estimated savings of \$600,000 to \$1,000,000 (FY 2007-2008 through FY 2011-2012) through lower funding rates as a result of decreased auto liability claim frequency and average claim severity.

SAFETY IN DESIGN AND CONSTRUCTION

A strong physical plant safety and risk management program goes beyond code and regulations. By incorporating best practices into the design and construction process upfront the total cost of ownership can be reduced. Total costs of ownership include maintenance, safety retrofitting and the cost of injuries. Risk Services has engaged Capital Resources and representatives from EHS disciplines such as Ergonomics, Laboratory Safety, and Shop Safety for the purpose of creating a review process to ensure that UC's construction not only complies with code but includes practical features that minimize potential injury to staff, students, and visitors. As part of the UCPath Riverside office planning, ergonomics input was provided on aspects of workstation design in both cubicle and private offices, public spaces, and common areas with an end goal of providing a comfortable, ergonomically correct environment at a direct cost savings.

SURGICOUNT

Failure to maintain an accurate sponge count resulting in retained sponges is a common medical error that can cause patient harm, adverse publicity, and time and expense in litigation and with licensing body investigations and penalties. Despite national standards for sponge-counting the task is error prone for multiple reasons. Use of a data-matrix-coded system technology such as the SurgiCount Safety Sponge System (<http://www.surgicountmedical.com/>) or RFID technology such as ClearCount (<http://clearcount.com/>) has helped UCSF avoid retained sponge cases since 2007. As part of the effort to reduce the incidence of retained sponges during operative procedures, the Professional Medical and Hospital Liability Program offers the medical centers premium rebate credit for deployment of technical solutions such as Surgicount to support the sponge count process. To date UCSD, UCI, UCSF and UCLA are using either SurgiCount or ClearCount; UCD has not implemented either technology.

PRESCRIPTION REBATE PROGRAM

The Professional Medical and Hospital Liability Program offers grant funds and premium rebates to the University's medical centers and schools of medicine to support loss prevention activities. Each location has the ability to request funds for loss prevention projects. Additional premium rebate funds are targeted to specific system goals. To improve the rebate program, Office of Risk Services partnered with Health Sciences and Services in 2012 and a revised process was developed with the input of the Schools of Medicine and Medical Center leadership. As a result, the Center for Health Quality and Innovation (CHQI) was formed. CHQI's goal is to

support innovations at the UC health campuses that transform the way the health needs of Californians are addressed and therefore advance the health of California and beyond. Thus far, CHQI so far has issued an initial round of grants, 11 grants to improve care to surgery patients and two rounds of fellowships, and has also hosted two colloquiums. More information regarding the specifics of each grant can be found on CHQI's website: <http://health.universityofcalifornia.edu/innovation-center/>.

CHILDREN ON CAMPUS

The University operates a number of programs that involve youth on our campuses and at other University facilities. This includes on-campus daycare centers and 4-H programs, as well as young prodigies assisting researchers in our labs. Working with minor children presents a unique risk for the University.

The University has taken great strides in the area of risk involving minors on and off campus who participate or are part of various UC programs or camps, or are enrolled in day care or as university students. An abuse risk management consultant was introduced to all locations in 2012 and all locations have received access to various on line training modules, sample policies and best practices. Additionally, a training module was developed to compliment the University's policy on Reporting Child Abuse and Neglect in compliance with the California Child Abuse and Neglect Reporting Act (CANRA). The consultant also participated in the 2013 Risk Summit and participated in discussions with workgroups such as the Recreation Sports Directors, Student Affairs and Risk Management.

CAMPUS CAMPS AND VOLUNTEERS

As the administrator for 4-H programs in California, the University's Division of Agriculture and Natural Resources (ANR) has developed a robust program to ensure child safety. These best practices include precautions such as background checks for all volunteers who work with minors and establishing procedures so that no adult ever works one-on-one with individual children. Building upon the success of the ANR program, the systemwide Risk Management Leadership Council (RMLC) formed a committee that reviewed best practices in 4-H and other camps around the system.

In an effort to implement and maintain the California Health Code regulations for UC organized camp programs, the RMLC-sponsored Risks to Minors workgroup, in collaboration with one of UC's insurance brokers, developed a set of best practices and recommendations that was completed and distributed this past fiscal year. Additionally, training materials and sample policies are now available to all the campuses through an abuse risk management vendor.

The workgroup will be reconvening this year to review what best practices have been adopted at the locations and any successes or challenges they experienced with the implementation.

PERSONAL PROTECTIVE EQUIPMENT POLICY & LAB SAFETY TRAINING

Personal Protective Equipment (PPE) is required whenever an employee is exposed to chemical or biological hazards. UC's PPE policy goes beyond regulatory requirements by broadening the scope to include students in academic laboratory, shop, and field settings and specifies training requirements. As part of the policy implementation, OPRS funded the purchase of over 200,000 laboratory coats and pairs of protective eyewear.

Laboratory safety training is required by Cal/OSHA and is a primary means to educate faculty, staff, students, volunteers, and visitors on the hazards associated with working in a laboratory with the goal of preventing workplace injuries. The new systemwide policy brings consistency in the University's laboratory safety training program and helps assure that minimum training requirements are met. As part of the implementation of the new policy, the EH&S Directors Leadership Council developed an online Laboratory Safety Fundamentals course. This new course has been very well received and was recognized by the Campus Safety, Health, and Environmental Managers Association with the Solutions at Work Award.

MINORS IN LABS POLICY

Minors working in research laboratories present a unique exposure to the University both in the type of research being conducted and in ensuring that parents understand the potential risks of their child working in a laboratory. The Environment, Health and Safety Directors Leadership Council drafted the systemwide policy on minors working in laboratories to help ensure the safety of these students and bring consistency throughout the system. The policy establishes restrictions on the type of research a minor may be involved in and requires parent permission for their minor child to participate. Additionally, the policy requires that those supervising the minor in the laboratory complete a background check.

FOREIGN OPERATIONS AND TRAVEL PROGRAM

The University of California's mission takes faculty, staff and students all over the world, introducing a variety of travel risks subject to constant change. Risk Services manages a significant network of programs which provide services to our faculty, staff and students who travel internationally to teach, perform research, and set up operations in foreign countries. Risk Services developed a web portal, UC TRIPS, to capture travel information that would enable the University to procure better coverage to protect the health, safety and security of faculty, students and staff while traveling on University business. The portal and programs service travelers in the following manner:

- **Foreign Operations and Researchers** – The University provides a web-based Field Operations Planner. This web planning tool will help the researcher address possible risks specifically associated with field research and foreign operations. This tool was developed to assist in the creation of a customized field/foreign operations plan, which the researcher can carry on a laptop or PDA or can print as a paper version. It gives the opportunity for the researcher to review and address risks prior to departure.
- **UC Education Abroad Program (UCEAP)** – Experience has shown that for a number of reasons, including the transient nature of the traveling undergraduate, students are resistant to registering their travel plans. To address this, working with UCEAP and our travel vendors we upload UCEAP participants into the travel database by academic term, so that they can receive the real-time alerts and be tracked in the event of an emergency.
- **Faculty, Staff, and Non-UCEAP students** – When a traveler arranges a trip through Connexus or books travel on their own and registers that travel through UC TRIPS, they immediately have the ability to receive real-time alerts on conditions impacting their travel (for example, health, security, weather, natural disasters, airport closures, civil unrest etc). It also allows UCOP and their local campus to know where they are when problems arise and improves the ability to maintain contact with the traveler.

FOREIGN OPERATIONS AND TRAVEL PROGRAM – HIGHLIGHTS AND RESULTS

OPRS has built an elaborate network of travel insurance and security services that are provided to students (including Education Abroad Program participants and non-participants), staff and faculty. Program registration through UC TRIPS enables UC Risk Services and the Education Abroad Program to track the traveler and send “real time” alerts when issues surface affecting health, safety and security. The program is integrated with the University's ERM program offering tools that can perform location-specific risk assessments. The program includes expanded travel assistance resources — in particular, medical evaluation and security extraction which can deploy emergency response services throughout the world at a moment’s notice.

During FY 2012-2013, the University’s travel program oversaw evacuation of students during the July 2013 civil uprising and military takeover in Egypt. The University was able to closely monitor the emerging tensions between Egypt’s pro- and anti-government supporters and safely evacuate 17 study abroad students and staff. Shortly after, in August 2013, Yemen had heightened security threat levels due to terrorist activities and civil unrest; the U.S. Department of State urged U.S. citizens to depart immediately if they were in Yemen and to defer any travel to the country. The University responded to locate, monitor, and ultimately provide for the safe return of a UC graduate student and his family.

In addition to providing evacuation assistance to students, faculty, and staff, the program also focuses on helping travelers research, plan, and prepare for their travel or programs located abroad. This past fiscal year, we have conducted various risk assessments ranging from physical security assessments, situational updates, and itinerary assessments, to curriculum and full spectrum analysis on countries and locations such as Israel, Uganda, Congo, Nigeria, and Mexico City.

The recent enhancements in Worldcue Planner, a global intelligence online resource that provides comprehensive destination and travel safety and security information, allows the University to gain insights on our travelers’ destinations and allows us to address any safety, health, and security concerns ahead of time. With the many evacuations this past year due to arising security issues around the world, these travel tools have assisted us in performing risk assessments prior to travel that prevented many emergency evacuation situations.

Knowledge of the travel program and the resources it provides continues to spread. Understanding is increasing among faculty, staff, and students that if they register their trips they receive coverage and real-time alerts. In addition, we have travel risk assessment predictive intelligence and tools which enable our travelers to take full advantage of the many pre-travel tools available to them. The goal is for the traveler to be more proactive and less reactive when planning travel. Table 6 indicates the number of trips taken last year by University faculty, staff and students.

Being able to track our travelers helps the University alleviate insurance underwriter concerns related to travel in countries where there may be risk of unrest, such as Egypt (105 trips during FY 2012-2013), Afghanistan (14 trips), Iran (10 trips), and Iraq (2 trips).

TABLE 6. UNIVERSITY TRAVEL DESTINATIONS

Country/Region	Total Booked Trips
Africa	2,154
Asia	8,820
Europe	13,174
North America	40,272
South America	1,724
Oceania	1,001
Total Trips	67,145

Additionally, there were 4,885 trips during the year by “expats” – members of the University community engaged in long-term travel for study or research, including the Education Abroad Program.

RISK FINANCING

The directors and program managers in Risk Services work diligently to implement risk financing strategies that help reduce the number of claims and mitigate the losses when they occur.

The service providers for all categories (auto, employment practices, general liability, professional medical hospital liability and worker’s compensation) are our third party administrators, who are listed below with their functions:

TABLE 7. THIRD PARTY ADMINISTRATORS BY FUNCTION

Function	Service Provider
Independent Auditor	PricewaterhouseCoopers LLP
Independent Actuary	Bickmore Risk Services
Captive Manager	Willis Management (Vermont), Ltd.
Claims Administrator	Sedgwick CMS
Reinsurance Brokers	Marsh, Alliant, and Aon
Legal Counsel	McDermott Will & Emery LLP

CAPTIVE INSURANCE

In late 2010, the Office of Risk Services, which is located within the CFO Division of the University of California’s Office of the President, initiated a feasibility study for the creation of an alternative risk financing entity such as a captive insurance company. The purpose of such an alternative risk financing entity would be to reduce UC’s cost of traditional insurance while giving it greater control over the various risks for which it is responsible. Many large public and private entities have successfully used captives to achieve significant cost savings and to offer improved risk and insurance-related services. OPRS engaged UC’s actuarial and risk consulting firm, Bickmore Risk Services, to conduct the study.

The study determined that of the alternative risk mechanisms evaluated a captive insurance company, formed and controlled by UC, offers the most comprehensive solution to enhancing UC’s current program.

REGENTAL APPROVAL OF CAPTIVE

At their meeting of May 16, 2012, The Regents approved the formation of the new Fiat Lux Risk and Insurance Company.

CAPTIVE CURRENT OPERATIONS

Fiat Lux is a non-profit pure captive insurance company now domiciled in the District of Columbia. It is a wholly owned subsidiary of The Regents of the University of California. The Directors and Officers of the Captive are:

- Janet Napolitano, Ex Officio UC Director/UC President

- Peter Taylor, Ex Officio UC Director , President & Chairman/UC Chief Financial Officer
- Charles Robinson, Ex Officio UC Director & Secretary/UC General Counsel and Vice President–Legal Affairs
- Cheryl Lloyd, Ex Officio UC Director & CFO/UC Interim Chief Risk Officer
- John Meyer- UC-affiliated Director/UC Davis Vice Chancellor–Administrative and Resource Management
- Max Jong, Independent Director/Risk Mgt. Advisors
- Philip Super, Independent Director/Roedel/Super LLC

Advisors to the Captive are:

- Sherry Ricker, Contractor Captive Specialist/VP Willis VT
- Trisha Desranleau, Sr. Account Mgr Willis VT
- Susan Brault, VP Willis VT
- Aidan Kelly, Sr. VP Willis GA
- Marilyn Quinlan, Sr. VP Willis CA
- Sean Rider, Managing Director Willis NY
- Paul Craig, Chief HR Officer & VP of HR Children’s Hospital LA
- Norm Hamill, UCOP Senior Counsel

The Captive currently is retaining \$2.5 million of the University’s self-insured retention for our major self-insurance programs (General Liability, Professional Liability, and Workers’ Compensation). Being domiciled in Washington D.C. allowed the Captive to easily purchase terrorism coverage under the federally-sponsored Terrorism Risk Insurance Act (TRIA). In addition Fiat Lux has formed workgroups composed of insurance industry experts and campus practitioners to explore other lines of coverage that could be viable offerings through the Captive. The workgroups are:

1. Student Programs – this group is researching products that would benefit students, such as renters insurance.
2. UC Health – this group is researching the myriad of products that could be made available to further the work of our Health Enterprise, like coverage for “moonlighting” physicians or newly acquired practice groups.
3. UC Construction – this group is researching products that might facilitate the ease of construction projects throughout our systems. The possibility of offering surety bonds through the Captive may help the University’s construction program.

4. ERM Commercialization – this group is taking a look at the various tools UC has created through ERMIS, our Enterprise Risk Management Information System, and is determining which products may be marketable to other colleges and Universities.
5. UC Special Risk – this group is researching possible products that would respond to unusual occurrences (such as occupy protest response) to which traditional insurance may not respond.

CAPTIVE BENEFITS

Some benefits that UC will enjoy by utilizing a captive insurance company include:

- Because it is a self insurance vehicle, the captive is not subject to the wide swings of commercial insurance pricing; therefore use of a captive improves cost stability and predictability.
- Non-traditional (e.g., earthquake) and difficult to place risks (e.g., construction surety bonds) may be accommodated in a captive.
- Captive insurance companies are held to rigorous external accounting and auditing standards, which compel formalized risk financing policy and practice.
- Because it is considered a formal “insurance company”, a captive insurance company can directly access the reinsurance markets. This increases the number of insurance companies available to compete for UC business.
- A captive will be allowed to provide insurance to non-UC organizations (third parties such as affiliated physicians or joint ventures).
- Because the captive controls and issues the captive insurance policy (or “policy of indemnification”), it is able to structure terms and conditions. Instead of issuing their own policies, reinsurers will be asked to accept the terms and conditions of the captive company. This is known as “following form”. One advantage of this arrangement is that terms and conditions can be structured to enable the parent to control claims all the way up to the ultimate limit. This eliminates control of claims by insurers and provides UC final decision-making authority over if and when to settle, regardless of the amount of the claim.

USE OF CAPTIVES BY OTHER UNIVERSITIES

Captives are commonly used by both public and private universities, particularly universities that operate teaching hospitals. Most universities create captives to accommodate their hospital and physician professional liability and subsequently expand their captives to accept other lines of coverage. Captives routinely house professional liability for several reasons:

- This line of coverage is expensive and subject to wide swings in the commercial insurance markets.
- Professional liability has a “long tail”. Because claims payouts are slow, there is a potential to earn investment income on retained funds.

- Captives provide preferred access to international reinsurance markets, which improves terms and capacity.

Some universities that utilize a captive as part of their risk financing program are Cornell University (captive established 1978); Rutgers (captive established 1979), University of Michigan (captive established 1986); Duke University (captive established 1989); Northwestern University (captive established 1990); and Penn State University (captive established 1993).

RISK FINANCING – HIGHLIGHTS

UC generates one of the largest volumes of construction in the state of California and faces a myriad of risks relating to construction operations and defects, which vary with the size and type of construction project.

The University Controlled Insurance Program (UCIP) provides general liability, excess liability, and workers' compensation for all enrolled projects with construction budgets of over \$25 million. The program has been in place since January 2010 and is a Working Smarter initiative that was designed to reduce the cost of insurance for University construction projects. In addition to savings that can range from 1% to 3% of construction costs, benefits of the program also include higher limits; dedicated per project limits for construction defects; broad, uniform and consistent coverage; enhanced and coordinated safety; and potentially reduced cross-litigation expenses.

Because the actual project savings are audited as projects close out, fully evaluating actual savings requires that the program mature to a point that there is a credible volume of closed out projects. As of June 30, 2013, the University has enrolled 23 projects with a combined construction value of just under \$1.6 billion, with just two smaller projects having reached close out. We expect additional projects to close out in the coming fiscal year. As contract bidding and construction phases begin, we also anticipate the enrollment of additional projects during the fiscal year.

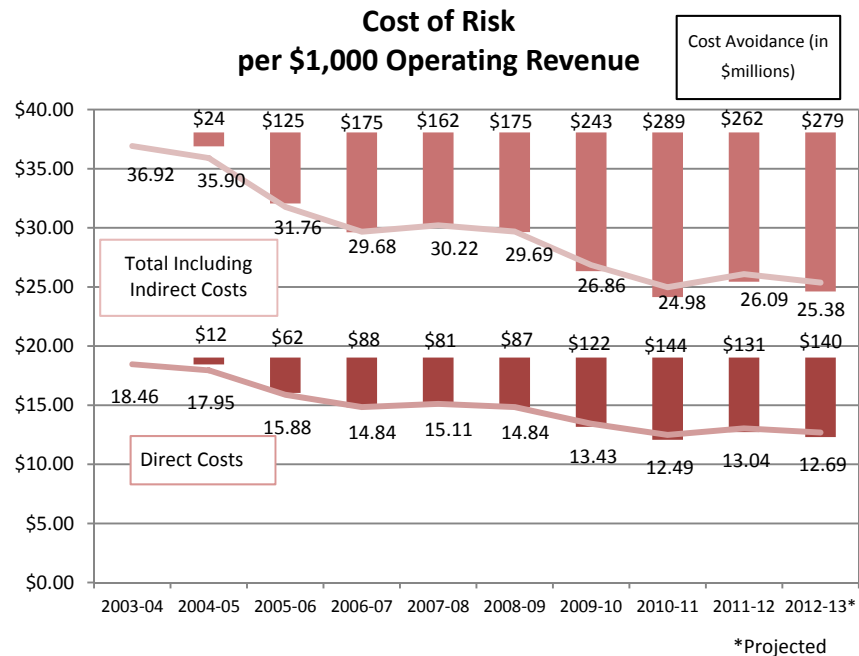
The audited savings on the two smaller projects that have closed out is \$603,000. Most of the remaining 21 projects currently enrolled should be closing out in the next three years, with additional projects enrolling into the program along the way. Going forward there is potential for savings to increase as contractors must renew their insurance annually and face a hardening insurance marketplace. In particular, the California workers' compensation filed insurance rates for construction risks have increased. By contrast, the UCIP costs are locked in for projects that complete by January 2018.

In addition to the projects enrolled in the UCIP, there is also the UCSF Mission Bay Medical Center project, for which UCIP coverage was placed separately in a standalone program due to the project's size and complexity. Initial estimates expect this project to reach \$800 million in construction value, with the project set to complete close out in two years.

ONGOING SUCCESS IN REDUCING THE COST OF RISK

The total cost of risk for the University includes self-insured losses, premiums, claims administration, and loss control and loss prevention expenses. For the purposes of comparing by year, the total cost has also been stated as an amount per \$1,000 of systemwide operating budget.

FIGURE 3. COST OF RISK PER \$1,000 OPERATING REVENUE FOR FY 2012-2013



As Figure 3 shows, Risk Services has continued to drive down the estimated total cost of risk over the last several years, from \$18.46 per \$1,000 operating budget in FY 2003-2004 to \$12.69 in FY 2012-2013. The University’s cost of risk is increasing, with over 90% of the uptick is attributable to increased ultimate claim cost estimates. In addition, Risk Services is offering more services and covering more occurrences than we have traditionally done in the past.

UC’s cost of risk is made up of a variety of components, with the largest being self-insured claims. Based on recent analyses it has been estimated that the amounts incurred for the cost of individual claims account for about 2/3 of the annual total. The remaining 1/3 of the cost of risk goes toward expenses for claims administration and loss control and loss prevention programs, as well as excess insurance premiums to cover the costs of individual claims above UC’s retention level.

UC has been successful in managing its risk by investing in claims administration and loss control and loss prevention programs. The Be Smart About Safety program in particular has impacted the loss experience, resulting in a reduction of the actuarial estimates of ultimate losses and therefore also in the total cost of risk.

CRISIS & CONSEQUENCE MANAGEMENT

Our Emergency Management staff continues to work proactively to create a disaster-resistant and disaster-resilient “event-ready” University with effective crisis and consequence management capabilities. We continue to make progress to prevent, mitigate, prepare for, respond to, and recover from any adverse event or disruption including natural disasters, technological hazards, human-caused disasters, or acts of terrorism. Our progressive approach will safeguard the University’s assets, including people, property, and research. We continue to develop systemwide programs engineered to support all locations for common hazard exposures and to leverage our considerable campus expertise and experience.

CRISIS & CONSEQUENCE MANAGEMENT – HIGHLIGHTS

Risk Services supported the development of a model campus Management Response Plan (MRP) in order to provide a clear, consistent, and documented executive management process for response to events or issues that either rise to the level of a crisis or have the potential to become a crisis. The MRP defines a process for how campus senior executive management will engage, deliberate, and make strategic decisions in response to a full range of risks including major emergencies, interruptions to campus operations, and emerging issues that threaten the reputation or organizational, legal, or financial stability of the University. The MRP outlines a recommended organizational structure, team roles and responsibilities, activation and notification procedures, and concept of operations for senior campus leadership. It also clarifies coordination and communication between campus executive management and UCOP.

Risk Services supported the development of a UCOP Crisis Communications Plan (CCP) in coordination with UCOP Strategic Communications. The purpose of the CCP is to document UCOP's process for effectively providing crisis communications support at the time of a crisis or potential crisis event or issue similar to those situations that trigger the activation of the Management Response Plans. The CCP establishes processes to manage consistent and effective communications across the broad spectrum of University stakeholders.

UCOP now has a functional Emergency Operations Center (EOC) and dual-use ground floor conference facility that enables us to effectively direct, control, and coordinate major systemwide and UCOP emergency response and recovery efforts and support operations. Following extensive training, UCOP held its first-ever functional disaster exercise in its EOC facility to vet its emergency plans and procedures and train executive management and response support team staff in 2012. In coordination with UCOP Financial Management, an emergency procurement card purchasing system was implemented to enhance UCOP's ability to quickly repair/replace critical infrastructure or purchase whatever supplies and equipment needed to maintain or restore UCOP operations and facilities.

The University's Civil Disobedience Initiative (CDI) was created to oversee implementation of the recommendations of the Robinson-Edley report issued in September 2012 in response to campus protest incidents. The Robinson-Edley report provides recommendations based on a review of existing policies and procedures related to the University's response to demonstrations and civil disobedience and focuses on identifying best practices for the University's approach to protest management. This report guides the UC system and campuses in how to respond to future protests effectively by addressing roles and responsibilities; policies; organization and structure; and training: <http://campusprotestreport.universityofcalifornia.edu/>

Risk Services played key roles in both the CDI Advisory Group and Incident Management Training workgroup. In response to the recommendation to implement formal training of University administrators at both the systemwide and campus levels, Risk Services staff was instrumental in the planning, development, and conduct of Crisis Leadership training for all senior University executives. Risk Services led the creation of the scenario-based seminar content and curriculum and assisted in successfully conducting the University's first-ever Crisis Leadership education for Chancellors and senior executives. The scenario-based policy and strategy discussions explored campus risk-sensing, situational awareness, and decision-making processes as well as effective crisis communication. Subsequently, two regional training sessions were conducted to train an additional 200 senior University executives and management staff to provide them with processes, skills, and tools required to effectively manage a crisis.

Immediately after the Virginia Tech mass shootings in April 2007, the University convened the campus Police Chiefs, Vice Chancellors of Student Affairs, and other relevant university officials to explore the full range of issues evident in the shootings. Subsequently, then-President Dynes created the UC Campus Security Task Force to “...study how campuses can enhance their security, notification processes, mental health services, and general preparedness.” The Task Force decided to review three principal areas: student mental health, campus safety, and crisis communication and emergency preparedness – and created workgroups to address each area. The workgroups focused their attention on identifying gaps or enhancements necessary to ensure that the entire University community is afforded the greatest protection available. In 2013, Risk Services followed up by researching and issuing a progress report summarizing the Task Force’s original primary recommendations related to student mental health; crisis communication; and campus safety, preparedness and response, and providing a summary discussion of the implementation status for each of the Task Force report’s corresponding recommendations. The Campus Security Task Force Progress Report is posted on the Risk Services website at:

http://www.ucop.edu/risk-services/_files/campus-security-task-force-2013.pdf

CRISIS & CONSEQUENCE MANAGEMENT – RESULTS

A wide variety of initiatives and projects were completed over the course of FY 2012-2013:

- UCOP has a functional Emergency Operations Center (EOC) and dual-use conference facility that enables us to effectively direct, control, and coordinate major systemwide and UCOP emergency response and recovery efforts and support operations. Following extensive planning and coordination with UC Irvine emergency management staff, UCOP held the first-ever University joint emergency functional exercise in March 2013. Risk Services emergency management staff served as the UCOP Exercise Director and a multi-campus pandemic outbreak scenario was developed to test UCOP’s crisis management and crisis communications capabilities in real time. The exercise clarified the policy and support roles of UCOP during a campus crisis and increased the understanding of how UCOP will coordinate response with impacted campuses and their activated response teams. Real-time information sharing processes between UCOP and a campus were also validated. This joint exercise added a dynamic dimension that added to the sense of realism and helped build both UCOP and campus experience and expertise to cooperatively, confidently, and comfortably deal with potential campus and systemwide crises.
- Risk Services acquired, deployed, and manages a systemwide Mobile Satellite Radio (MSAT) system at all locations to support both emergency operations and interoperable communications in the event of conventional telecommunications systems failure. This “failsafe” satellite-based system operates independently of any ground-based communications architectures and serves as the only functional systemwide inter-campus communications system. The system can be used to coordinate inter-campus mutual aid as well as University mutual aid coordination with statewide public safety agencies via the Cal-OES “SKYMARS” mutual aid talkgroup. It can also be deployed in the field at Incident Command Posts in direct support of campus emergency operations. Risk Services coordinates monthly tests of the system with all locations.
- Risk Services continued to support the University’s systemwide approaches to behavioral threat management. Campus Threat Management Teams are key factors in reducing and containing intimidating or threatening behavior by students, staff, and other members of the campus community. To assist the campuses in meeting this challenge, Risk Services continued to work on developing a

software tool to support campus Threat Management Teams. The Behavioral Intervention Tool (BIT) will be a centralized threat incident tracking database with a graphical user interface that will facilitate the gathering, organization, access, and reporting of important incident-related data in a secure manner. A systemwide workgroup has been formed to guide the BIT's design development and system requirements. Risk Services anticipates the completion and roll-out of the BIT this year.

- Risk Services compiled and issued the Annual Emergency Management Status Report to senior University management. Risk Services collaborated with the campuses to develop a NFPA 1600 Standard benchmarking guide that defines specific quantifiable performance criteria for each of the NFPA's 70+ programmatic criteria, producing a performance management system that is accurate, credible, objective, and consistent across all UC locations. Campus programmatic benchmarking data is automatically entered into ERMIS as a Key Performance Indicator (KPI) dashboard. The annual report is posted online at http://www.ucop.edu/risk-services/files/emergency/em_annual_rpt.pdf
- UC Berkeley's Office of Emergency Management coordinated with Risk Services to plan and host the nineteenth annual systemwide Emergency Management and Continuity Planning conference held on the Berkeley campus in October 2012. The conference was attended by approximately forty systemwide personnel involved in crisis and consequence management. Conference topics included campus business impact analyses, mass emergency notification systems, National Weather Service's "StormReady University" program, demonstration of a wireless application for transmitting situation status reports, UCSC's "Ready Slug" video project, online emergency action plans, and call center services. In addition, there were facilitated discussions on sharing systemwide best practices and program benchmarking standards as well as separate workgroup breakout sessions for campus and medical center emergency managers and continuity planners.
- Risk Services coordinated with UCOP Institutional Research staff to obtain a systemwide multi-year summary of research funding for each campus academic department. This information is very useful for the campus continuity managers to help quantify the financial business impact caused by interruptions, and therefore assist in determining cost-effective mitigation measures as well as recovery priorities.
- The University of California is regarded as the leader in academic continuity planning. Our UC Ready tool, launched in 2006, defined the genre. UC Ready is now being used by more than 80 universities and colleges in the United States, Canada, and Australia, including many of our peer institutions. Following the launch of UC Ready, faculty asked for a highly streamlined continuity tool focused on teaching and research. In response to this request, a new continuity planning tool, UC Resilient, was completed during FY 2011-2012. This easy-to-use web application filled that need and serves as a valuable adjunct to our mainstay UC Ready tool and shares its goal: to assist departments to continue our teaching, research, service, and patient care functions despite adverse events such as earthquakes, fires, pandemics, IT interruptions, acts of violence, or many others. In FY 2012-2013, UC Resilient Version 2 was released and made available for systemwide use. Version 2 incorporates a number of improvements and enhancements, including a new focus on best practices; a new "Basics for Recovery" section that makes a UC Resilient plan into a more robust departmental continuity plan; and a single, unified, exportable continuity plan document in Excel format.
- As of July 1, 2013, over 1,720 UC Ready campus department continuity plans have been completed, with another 668 plans in progress. On a systemwide basis, 56% of the continuity plans have been completed, approximately in line with our original target of 50% set for Q4 of 2012, but still short of

the 75% target set for Q4 2013. Risk Services coordinates this program across all UC locations, defining metrics, setting goals, and tracking performance. In addition, Risk Services continues to provide matching funds to all locations for staffing the continuity planning program.

CONCLUSION

The last several years have been a financially challenging time for the University. Even in the face of those challenges the University has made significant strides in reducing our risk exposure, thereby allowing the campuses to focus their limited dollars on our mission of teaching, research and service. ERM is intended to be a continuous improvement process and the Office of Risk Services, as part of the CFO Division, has integrated the Division Strategic Goals (<http://www.ucop.edu/finance-office/mission-goals/strategic-goals.html>) into our operations:

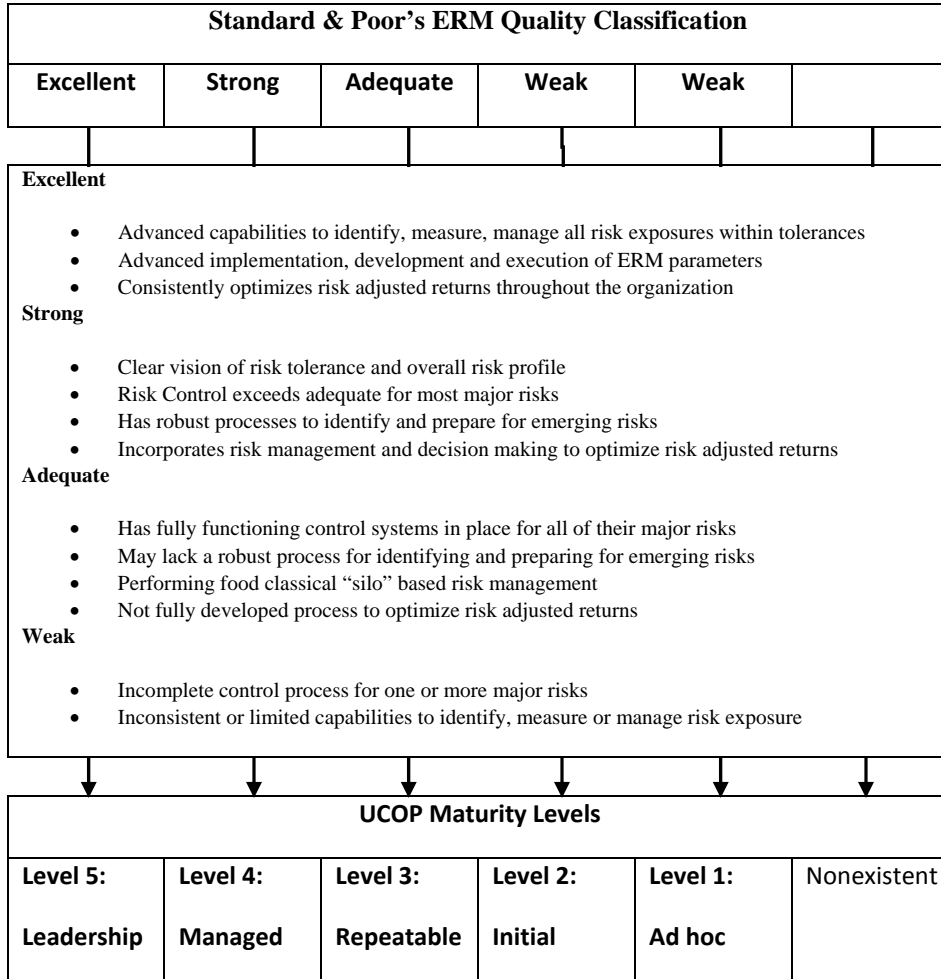
- Reexamine the Day-to-Day
- Showcase our Value-Add
- Engage with the Customer
- Develop our Staff
- Be Action-Oriented

Risk Services continues to reexamine the day-to-day operations, looking for innovative ways to reduce risk while improving operational efficiency. We continue to showcase the savings that are generated by implementing ERM and continually engage our customers to learn how we can better meet their needs. We not only focus on developing our staff, but encourage the professional development of those at the campuses and medical centers by providing the Risk Summit and monthly webinars. Finally, the tools and information provided by Risk Services allows campus and medical center leadership to be action oriented and to be able to quickly implement programs that will result in immediate impacts. The guiding principle in all of the work that Risk Services does is to support the University mission of teaching, research, and service.

APPENDIX A UC ERM PROGRAM MATURITY ASSESSMENT SCALE

Measuring Levels of Maturity

Standard & Poor’s is integrating ERM Analysis into its credit ratings. In response, UC Risk Services has developed a scale for measuring our ERM Maturity Levels based on the Standard & Poor’s scale:



Campuses are currently developing ERM Work Plans using the UCOP scale to measure their maturity levels, from which UC Risk Services is developing a Systemwide view of ERM.

UC MMR (My Managed Risk) Portal

ucop.edu/enterprise-risk-management

530-638-3375

ERM
ENTERPRISE RISK
MANAGEMENT
SERVICE DESK

Helping You
Manage Your Risk

Technology Support

erm@ucop.edu



Request Access

ERM Solution Set

Portal Applications

- Behavioral Intervention Team System (BIT)
- ServiceNow
- Campus Connections
- Stored Information Retrieval System (SIR)
- Connexus
- Suite of Environmental Health & Safety Systems (UC EH&S)
 - Biosafety Information Online (BIO)
 - Chemical Inventory System (CIS/CBI)
 - Lab Hazard Assessment Tool (LHAT)
 - Online Training Program (OTP)
 - SADDICAL
 - Safety Inspection Tool (SIT)
- Yos - Claim System
 - General Liability System
 - Professional Liability System
 - Workers' Compensation
- Learning Management System (LMS) Reports
- UC Forms
- UC Plan (TMI)
 - Budget Development System (BDS)
 - Capital Markets
 - RCPO
- Legisbill
- LMS Integration Tools
- UC Ready
- UC Resilient
- UC RiskWorks (also known as Edge)
- Occupational Health Surveillance System (OHSS)
- UC SharePoint
- Point N Click (PNC)
- UC Action
- Power - DHS
- Risk Assessment Tools
- UC Tracker
- RL Solutions
- UC Travel Assistance
- Settlement Authorization Request (SAR)
 - Jet
 - UC Trip Planner
 - UC Travel
- SYSTOC

Enterprise Risk Management Program

- Enterprise Data Mgmt./Analysis
- Enterprise Risk Management Information Systems
- Enterprise Toolboxes
- ERM Systemwide Panel
- Risk Assessments
- Risk Management Leadership Council
- Risk Management Tools & Training
- Risk Ranking Tools
- Risk Summit
- UC Action
- UC Tracker

Loss Prevention & Loss Control

- Be Smart About Safety
- Employment Practices Improvement Committee
- Environment, Health & Safety
- Environment, Health & Safety Leadership Council
- Environment Due Diligence Program
- Field Operational Planner
- Occupational and Employee Health Advisory Coalition
- Prescription Rebata
- Threat & Security Services
- Travel Assistance
- Web-Based Incident Reporting System

Risk Financing & Claims Management Program

- Auxiliary Groups
- Construction
- Cyber Risk
- Employment Practices Liability
- Foreign Liability
- General Liability & Auto
- Human Subject Injury
- Professional Medical Liability & Clinical Operations
- Property & Fine Arts
- Student Life - SHIP & other benefits
- Workers' Compensation

Crisis & Consequence Management

- Crisis Communications
- Emergency Management
- Public Safety
- UC Ready

UC MMR Portal My Managed Risk

<http://www.ucerm.com>

Our solutions allow the University to take on new opportunities and, by managing risk strategically, ensure optimum outcomes. We have learned that by focusing on developing tools that address a broad array of risks, both frequent and infrequent, large and small, we create a more efficient and effective program.

System	Description
Behavioral Intervention Team System (BIT)	The BIT system is a tool for the campus Behavioral Intervention Teams. The system provides a central hub for information on campus incidents, pulling together necessary data from department specific systems.
Campus Connexions	Campus Connexions is a program that provides insurance coverage to faculty, staff, students, and supporting third parties (e.g., foundations, alumni associations, etc.) for events and activities held on campus.
Connexus	Connexus is the UC & CSU system wide travel program that combines discounts with a range of booking options, providing value, flexibility, and convenience for UC and CSU business travelers.
Employer's 1st Injury Report	Employer's 1st Injury Report, an online system that satisfies Cal-OSHA and Labor Code requirements for employers to document and investigate the causes of employee injuries.
ERMIS Dashboards	ERMIS Dashboards provide and integrate reporting solutions to business users and executives from relevant administrative systems.
Integration Middleware (SUSHI)	An integration framework that enables communication between different systems and modules.
iVos – Claim System • General Liability System • Professional Liability System • Workers' Compensation	iVOS is the UC primary database for managing worker's compensation, general liability and professional liability claims.
Learning Management System (LMS) Reports	A web-based reporting interface that provides custom report from LMS.
Legalbill	Risk Services has retained Legalbill, a legal spend management solution, to monitor, measure, and manage its legal spend.
LMS Integration Tools	The LMS Integrator provides campus departments the ability to request and obtain course record completion data for the purpose of integrating the data into an existing campus system.
Marsh eRoom	An online tool for OP Risk Services partners and vendors who participate in the monthly Risk Services "All Hands" meetings to track and update projects and post documents.
Occupational Health Surveillance System (OHSS)	OHSS is a system for Principal Investigators (PIs) and their staff to submit a health surveillance survey. The clinic physician reviews the survey and determine staff fitness to perform the work.
Point N Click (PNC)	An electronic medical records system in support of Student Health clinics at 10 UC Campuses.
Power DMS	A system for law enforcement at UC Campuses to track required trainings to ensure compliance.
Risk Assessment Tools	The UCOP Office of Risk Services (OPRS) offers several Excel-based tools intended to support the risk assessment process at each of the UC locations. Each of these tools has been constructed to provide insight from multiple perspectives.
RL Solutions	An incident reporting system at the Medical Centers, Student Health and Counseling Centers.
Settlement Authorization Request	Online claims settlement approval process for Risk Services related claims that follows Regents Policy 4105.
ServiceNow	The ERM incident and project portfolio management system.
Stored Information Retrieval (SIR)	SIR is the Stored Information Retrieval System.
SYSTOC	An electronic medical records system for Occupational Health which streamlines patient record processes, promotes accurate data, and reduces reliance on paper records.

System	Description
Suite of Environmental Health & Safety Systems (UC EH&S) <ul style="list-style-type: none"> • Biosafety Information Online (BIO) • Chemical Inventory System (CIS/CBIS) • Lab Hazard Assessment Tool (LHAT) • Online Tag Program (OTP) • RADICAL • Safety Inspection Tool (SIT) 	<p>The BIO system automates the Biological Use Authorization process and manages the documentation required for use of viruses, bacteria and recombinant DNA.</p> <p>CIS/CBIS collects information related to chemicals to assist with regulatory compliance in the following areas: Cal/EPA, Fire Codes, PA, Cal/OSHA and CUPA.</p> <p>LHAT is a self-assessment tool that enables the PI to identify hazards that exist in the lab.</p> <p>OTP is a web based system that provides automated hazardous waste tracking and tag generation. The system enables PIs/Researchers to create tags with the required fields to track hazardous waste for pick up when the accumulation time is reached or expired.</p> <p>RADICAL is a system for PIs who work with chemicals to perform Chemical Risk Management. It allows them to determine banded safety operating parameters or if a detailed SOP is needed.</p> <p>SIT is a system that will automate tracking laboratory safety processes.</p>
UC Forms	UC Forms enables rapid development of forms for capturing data for relevant business processes. It also enables the migration to paperless business processes.
UC Plan (TMI) <ul style="list-style-type: none"> • Budget Development System (BDS) • Capital Markets • Capital Projects • RGPO 	<p>BDS was implemented at UCOP to allow collaborative and effective budget planning and analytical reporting.</p> <p>Capital Markets, the online Month-End Funding platform, is being targeted for rollout in 2013.</p> <p>Capital Projects is a comprehensive planning tool for large scale construction across all campuses within the UC system.</p> <p>RGPO will be used as a grants administration database.</p>
UC Ready	UC Ready is a continuity planning tool designed to help the University resume its critical operations following an event/disruption of any size or type.
UC Resilient	UC Resilient is a continuity planning tool designed specifically for use by front-line teaching and research units.
UC RiskWorks (also known as Exigis)	UC RiskWorks provides tracking of certificates of insurance received from vendors/contractors. It also tracks certificates of insurance to verify the UC's self-insurance coverage.
UC SharePoint	UC wide Intranet.
UC Action	UC Action is designed to automate follow up and corrective actions. The system supports the Retrospective Review process for claims exceeding \$50K threshold.
UC Tracker	UC Tracker is a web-based tool that facilitates the review and documentation of key department controls.
UC Travel Assistance <ul style="list-style-type: none"> • Field Operations Planner • iJet • UC Trip Planner • UC Tripss 	<p>The Field Operations Planner is a travel planning system that helps UC travelers with operations abroad to address potential risks associated with field research and foreign operations. The system creates a customized field/foreign operations plan, which is available to the researchers as they travel to review and address risks prior to departure.</p> <p>iJet provides real-time intelligence and travel alerts designed to keep travelers well informed throughout their foreign travel, based on their individual itineraries.</p> <p>UC Trip Planner provides an overview of the country of destination plus security briefs, health briefs and in country cultural country customs for the UC traveler to consider before traveling.</p> <p>UCTRIPSS allows UC students, faculty and staff to register when they are traveling out of state on behalf of the university. The system provides the traveler with an insurance card that contains a phone number to obtain help or receive guidance in the event they are in troublesome situations while away.</p>

APPENDIX C LABORATORY SAFETY RESOURCES

UC LAB SAFETY

I am a Principal Investigator/
Lab Manager



The diagram illustrates the UC Lab Safety system architecture. At the center is a blue circle labeled 'MIDDLEWARE'. Surrounding it are several functional areas: 'Web Services', 'System Integrator', 'Profile Management', 'Facilities Information', 'Shared Data Elements', 'Role Management', and 'Web Services'. A ring of colored segments represents various tools: LMS (red), LHAT (green), SIT (purple), EFR (yellow), CIS (dark purple), CBIS (green), RADICAL (blue), WASTE (orange), BIO (red), OHSS (teal), FSTOP (blue), and LMS (red). External components are shown as blue arrows pointing towards the system: '+ Research in a Lab' (top), '+ Chemicals' (top right), '+ Biological Agents' (right), '+ Field Safety/Travel' (bottom right), '+ Operators Planner (FSTOP)' (bottom), and '+ Health Screening (OHSS)' (bottom left). A grey ring at the top contains labels for specific tools: 'Assess Lab Hazards (LHAT)', 'Safety Review (SIT)', 'Manage Chemical Inventory & Supplies (CIS/CBIS)', 'Managing SOP (RADICAL)', 'Manage Chemical Waste (WASTE)', 'Biological Use Authorization (BIO)', and 'Training (LMS)'.

UC EH&S Technologies

- BIO
Biosafety Information Online
Automates the Biological Use Authorization
- CIS
Chemical Inventory System
A system that manages chemical inventories in support of compliance with regulatory reporting with state and federal agencies.
- CBIS
Chemical & Biological Inventory System
A system for researchers handling chemicals to support their research functions. It includes the ability to search sequences, assays and property data. It is integrated with CIS to synchronize their chemical inventories.
- EFR
Employers 1st Report of Injury (EFR)
Employer's 1st Report of Injury, an online system that satisfies Cal-OSHA and Labor Code requirements for employers to document and investigate the causes of employee injuries.
- FSTOP
Field Safety/Travel Operations Planner
Enables the person responsible for the field trip to create a focused, custom operational plan that reduces risks and increases the personal safety for the participants
- LHAT
Laboratory Hazard Assessment Tool
Enables the PI to identify hazards that exist in the lab
- LMS
Learning Management System
Comprehensive training management
- OHSS
Occupational Health Surveillance System
Provides medical analysis of a Principal Investigator generated risk assessment with a worker's medical history to minimize medical risk in the research environment.
- RADICAL
Risk Assessment Determination in Chemical Academic Laboratories
Automate SOPs for handling chemicals
- SIT
Safety Inspection Tool
A Safety Inspection tool that automates tracking laboratory safety processes
- WASTE
Waste, Accumulation, Storage and Tracking electronic
A web based system that provides automated hazardous waste tracking and tag generation

ITSERVICES.UCDAVIS.EDU

CBIS
Chemical and Biological Information Systems
 Provides researchers with barcode labels for vials or plates, search chemical substructure matching or property filtering, manage chemical compounds and their properties, check duplicate structures and assigning unique IDs, assign IUPAC names, track inventory and withdrawal requests, provide links to lab notebooks and assay database.

CIS
Chemical Inventory System
 Provides administrators with the capability to maintain and track chemical information required by regulatory agencies, it meets the CalEPA requirement for the Unified Program information and assists UC to comply with: Cal/EPA, California Fire Code, PA, Cal/OSHA and OUPA Hazardous Materials Business Plan.

RADiCAL
Risk Assessment Determinations in Chemical Academic Laboratories
 A risk management tool that quickly determines a control-banded Standard Operating Procedure (SOP) to provide researchers with pertinent information to conduct their research safely.

SIT
Safety Inspection Tool
 Provides lab safety administrators with the tools to automate safety inspection processes. It will include the following functionalities: audit scheduling, self-audits, inspector led audits, required corrections with due dates, and completion of audits.

LHAT
Lab Hazard Assessment Tool
 A self-assessment tool that enables the PI to identify hazards that exist in a lab.

WASTE
Waste, Accumulation, Storage and Tracking electronically
 The system enables PIs/Researchers to create tags with the required fields to track hazardous waste for pick up when the accumulation time is reached or expired.

Training
Training Module
 Learning Management System tracks user registration and completion of all required courses.

Reporting
Reporting Framework
 Provides integrated reporting and aggregated data from the Chemical Technology Suite.

E-Notebook
Electronic Lab Notebook
 A one-stop tool for researchers to manage research and compliance.

UC Chemicals Technology Suite

An integrated modular IT system that addresses the needs of researchers and administrators to conduct research with chemicals in a safe and compliant manner.

For more information, please contact the ERM Service Desk at: erm@ucop.edu

Copyright © The Regents of the University of California, Davis campus. All rights reserved. Visit us at <http://itservices.ucdavis.edu>



APPENDIX E LABORATORY SAFETY SYSTEMS: EH&S TECHNOLOGY

During FY 2012-2013, President Yudof signed and issued three new University of California policies affecting workers in UC laboratory settings. The planned policy changes will affect all laboratory workers including students, graduate students, postdoctoral scholars, faculty or other academic appointees, staff, visitors, and volunteers. The earliest implementation of two of the policies will begin on October 31, 2013, to allow campuses time to implement any changes and inform lab workers. The PPE Policy will be implemented on March 31, 2014, after each campus holds a Personal Protective Equipment (PPE) Distribution Event, where appropriate PPE for every lab worker will be given to them.

These policies were developed in response to an agreement between The Regents and the LA District Attorney and have been expanded to include Cal/OSHA compliance to ensure greater safety in laboratory settings.

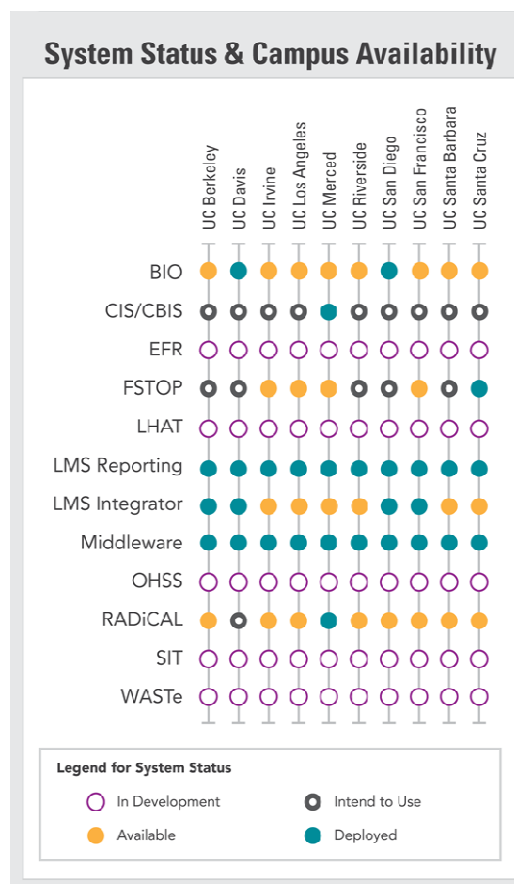
The following systems have been developed by IT Services at UC Davis (the ERM Center of Excellence for Technology) and implemented as a means to mitigate most or all of the risks of working in a laboratory. Many of the modules were showcased at the CHEMA Conference held in July 2013, and more than 20 Higher Ed institutions expressed interest in implementing the systems for their institutions.

BIOSAFETY INFORMATION ONLINE (BIO)

Biosafety Information Online (BIO) is a program outlining biological materials work that must be conducted by a Principal Investigator (PI) while simultaneously outlining regulatory conditions. BIO ensures compliance with the Institutional Biosafety Committee while limiting liability by clearly outlining containment requirements. BIO allows UC PIs to electronically complete, file and view Biological Use Authorization applications for research with recombinant DNA or infectious agents.

CHEMICAL INVENTORY SYSTEM (CIS)

Chemical Inventory System (CIS) is a robust, UC-wide chemical tracking system. CIS establishes inventory tracking standards for the UC system while saving money by cutting auditing timeframes for inventory managers. CIS is a web based system that facilitates the collection and storage of information related to chemical types and amounts within campus laboratories and facilities. The systemwide CIS is a 3rd party system developed by eCompliance. This system meets the CalEPA requirement to begin using the internet to file required Unified Program information and additionally assists UC in compliance with: Cal/EMA, California Fire Code, PA, Cal/OSHA and CUPA Hazardous Materials Business Plan reporting needs.



CHEMICAL & BIOLOGICAL INVENTORY SYSTEM (CBIS)

The Chemical Inventory System is available with an integrated module called the Chemical & Biological Inventory System (CBIS). CBIS is most commonly used by Chemistry and Physical Sciences departments because it allows PIs to perform many necessary functions all through one interface. They are able to search for chemical structures, print labels for vials or plates and manage their chemical inventory.

LABORATORY HAZARD ASSESSMENT TOOL (LHAT)

The Laboratory Hazard Assessment Tool (LHAT) is a systemwide, on-line assessment tool that helps Principal Investigators (PI) identify lab activities and hazards to ensure that personnel are properly protected in their work environment. LHAT facilitates compliance with the University of California Personal Protective Equipment (PPE) policy by presenting existing hazards and recommended PPE for lab personnel to review and providing them with access to required training while facilitating the ongoing distribution of PPE, ensuring lab personnel are adequately protected.

RISK ASSESSMENT DETERMINATIONS IN CHEMICAL ACADEMIC LABORATORIES (RADICAL)

Risk Assessment Determinations in Chemical Academic Laboratories (RADICAL) is a web-based risk management tool that quickly determines a control-banded Standard Operating Procedure to provide researchers with pertinent information to safely conduct their research. RADICAL also facilitates approval routing for high risk experiments. The RADICAL application was recently awarded the silver 2013 Larry Sautter award for Innovation in Information Technology and is currently available to all 10 University of California campuses.

SAFETY INSPECTION TOOL (SIT)

The Safety Inspection Tool (SIT) is a collaborative effort between EH&S and Information Technology units at UC campuses and EH&S at the UC Office of the President. SIT is an intuitive, onsite audit application for Inspectors that reduces the amount of time any given danger will exist in a workspace. The system is being developed to automate safety processes within each campus. It is a web based application that manages the scheduling, completion and long-term tracking of laboratory safety inspections.

WASTE ACCUMULATION STORAGE TRACKING ELECTRONICALLY (WASTE)

Waste Accumulation Storage Tracking Electronically (WASTE) is a web based system that facilitates regulatory compliant labeling, tracking, collection and shipping of radioactive, biological, and hazardous wastes. The systemwide application provides an interface between Principal Investigators (PIs), lab staff and other generators of regulated wastes and the waste management staff for that campus. WASTE provides automatic waste tracking and tag generation. The WASTE system will allow PIs and Researchers to complete and submit tags that notify waste management staff that waste is ready for pickup and disposal.